





















SUPERIOR











PRODUCTS FOR PROFESSIONAL APPLICATIONS

The Disano floodlights originate from a significant designing experience gained in every type of outdoor and indoor sport. Ranging from large stadiums to indoor stadiums, from golf courses to swimming pools, these products can provide efficient solutions to all the complex problems encountered in these types of project.

The Disano floodlights are able to comply with the demanding parameters required by the international competitions involving television broadcasts, and can blend perfectly in the case of particular environmental situations, for example, on a ski slope.

A complete range of powerful and reliable lighting fixtures for all the requirements of competitive and amateur sports activities.







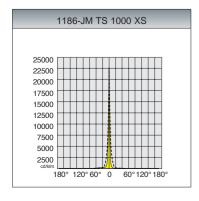


FORUM high performance



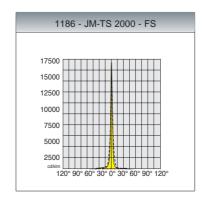


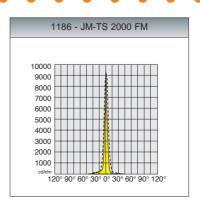


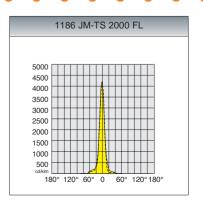




Camp Nou - Barcelona - Spain

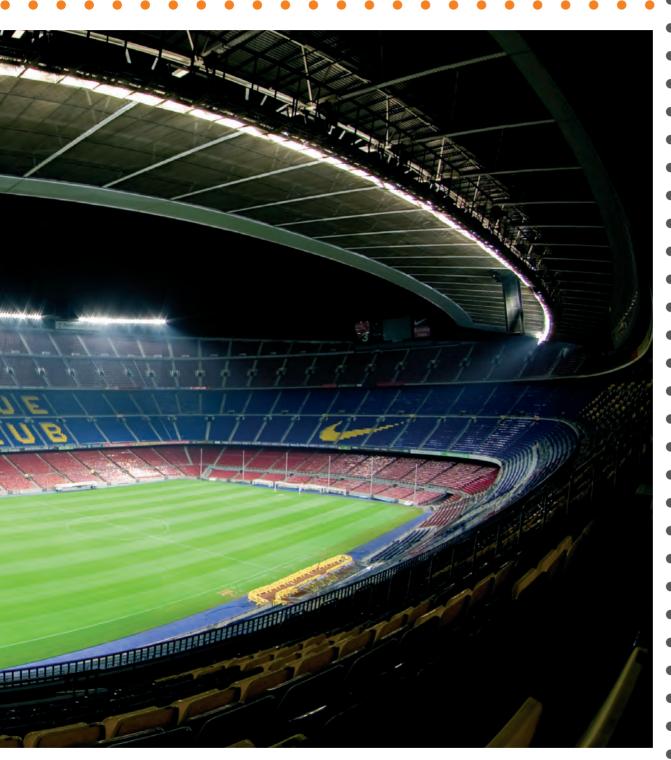












DESIGNED FOR HIGH OUTPUT SHORT ARC METAL HALIDE LAMPS

INCREASED PROJECT EFFI-CACY THANKS TO IMPROVED LIGHT OUTPUT

HIGH PERFORMANCE BODY WITH EXTRA COOLING FINS

Housing/frame: die-cast aluminium with cooling fins.

Reflector: aluminium 99.98, anodised and polished, with light beam recovering fin.

Diffuser: tempered glass 5 mm thick, resistant to impact and thermal shock.

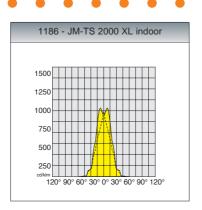
Coating: graphite grey polyester powder coating, resistant to corrosive and saline environments.

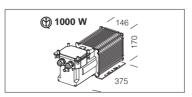
Electric gear: wire terminated with admiralty brass clamps, silicone insulation with cross section: 1.5 sqmm 2P+T nylon terminal block (maximum allowed lead cross-section: 6 sqmm).

Equipment: ssupplied with knife switch enabling safe lamp replacement. Galvanised and coated steel bracket with protractor scale and aiming visor. Ignitor box thermally isolated from the housing.

Forum lan	nps	JM #	-TMMT Description G22
	Flux	K	Ra
JM-TM 1000	110000lm	6000K	Ra 1a
Forum lamps MD cable			
JM-TS 2000 HO-SB	220000lm	5600K	Ra 1b
JM-TS 2000 HF	22300lm	5900K	Ra 1b

1186 - JM-TS 2000 XL 1500 1250 1000 750 500 250 cdkim 120° 90° 60° 30° 0° 30° 60° 90° 120°





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(3	ريا 	490		

Aluminium box Contents: ballast a

Aluminium box. Contents: ballast and capacitor (without ignitor).

acc. 1176 wiring DC IP66 JM-TS 2000

Aluminium box. Contents: ballast and capacitor (without ignitor).

FORUM

Geneva Stadium - Switzerland - 2008 UEFA European Championship

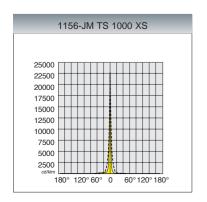


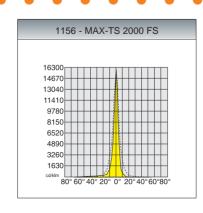


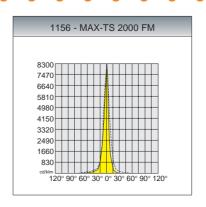
Picco Stadium - La Spezia - Italy

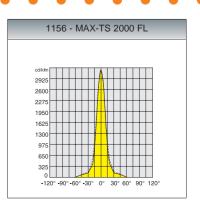


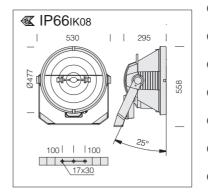




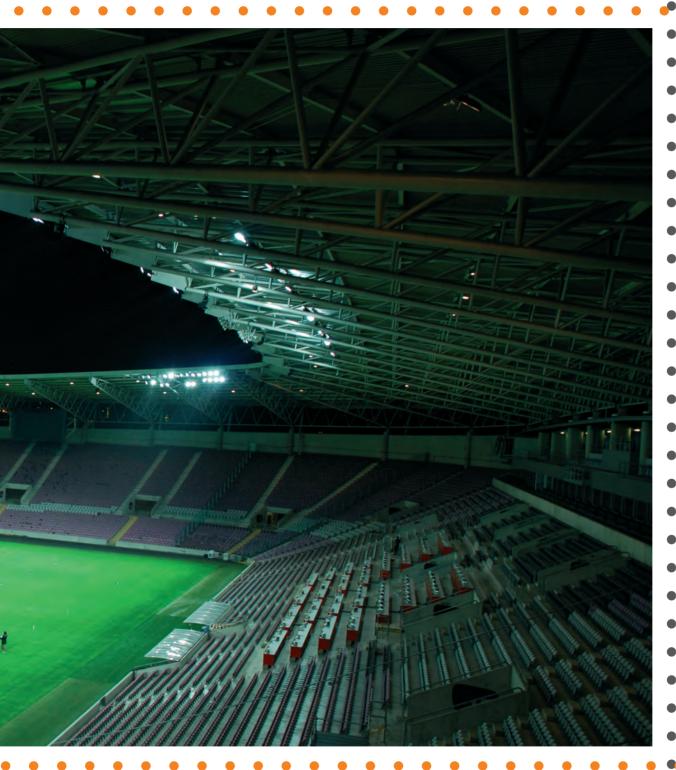












FOR INSTALLATION ABOVE 30 M H

CIRCULAR SYMMETRIC OPTIC WITH GLARE CONTROL ELE-MENT

FOR SHORT ARC METAL HALIDE LAMPS

Housing/frame: die-cast aluminium with cooling fins.

Reflector: aluminium 99.98, anodised and polished, with light beam recovering fin.

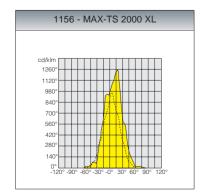
Diffuser: tempered glass 5 mm thick, resistant to impact and thermal shock.

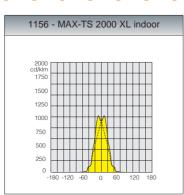
Coating: graphite grey polyester powder coating, resistant to corrosive and saline environments.

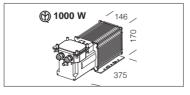
Electric gear: wire terminated with admiralty brass clamps, silicone insulation with, cross section: 1.5 sqmm 2P+T nylon terminal block (maximum allowed lead cross-section: 6 sqmm).

Equipment: supplied with knife switch enabling safe lamp replacement. Steel bracket with protractor scale and aiming visor. Retained steel screws with special anticorrosion and anti-gripping treatment. Igniter box thermally isolated from the housing. With gasket made of silicone platinic material.

Forum lan	m lamps 🖼		MD ⊙≕ v able
	Flux	K	Ra
JM-TS 1000 230V	90000lm	5900K	Ra 1a
JM-TS 2000 400V	200000lm	5900K	Ra 1a







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acc. 117	၆ wiring [OC IP66			
JM-TS					
Aluminium box.	Contents:	ballast	and		
capacitor (without	t ignitor).				

acc.	11/	b wiring l	DC IP66			
JM-TS 2000						
Aluminium	box.	Contents:	ballast	anc		
annogitor (withou	it ianitar)				

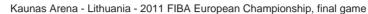
FORUM hot restrike





SRC Bonifika, Koper - Slovenia

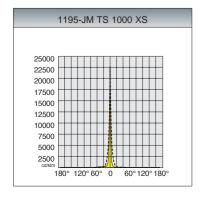


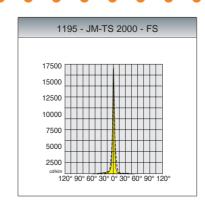


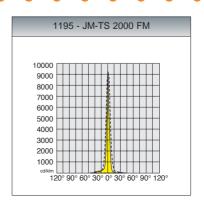


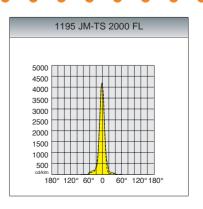
Milan Gale Muskatirovic, Belgrade - Serbia

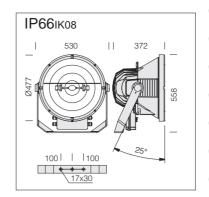


















AUTOMATIC DETECTION OF CONNECTED LAMP WITH RE-LATIVE START UP LOAD CON-TROL

SYMMETRIC STARTER WITH AUTOMATIC DISCONNECTION IN CASE OF EXHAUST LAMP, TO PRESERVE LUMINAIRE COMPONENTS

COMPLETE WITH BALLAST UNIT

Housing/frame: die-cast aluminium with cooling fins.

Reflector: aluminium 99.98, anodised and polished, with light beam recovering fin.

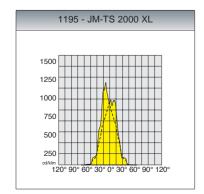
Diffuser: tempered glass 5 mm thick, resistant to impact and thermal shock.

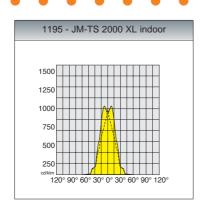
Coating: graphite grey polyester powder coating, resistant to corrosive and saline environments.

Electric gear: wire terminated with admiralty brass clamps, silicone insulation with, cross section: 1.5 sqmm 2P+T nylon terminal block (maximum allowed lead cross-section: 6 sqmm).

Equipment: supplied with knife switch enabling safe lamp replacement. Steel bracket with protractor scale and aiming visor. Retained steel screws with special anticorrosion and anti-gripping treatment. Igniter box thermally isolated from the housing. With gasket made of silicone platinic material.









Forum lamps MD cable			⊕	
	Flux	K	Ra	
JM-TS 1000	90000lm	5900K	Ra 1a	
JM-TS 2000	200000lm	5900K	Ra 1a	
Forum lamps JM-TMMT GY22				
JM-TS 2000 HO-SB	220000lm	5600K	Ra 1b	



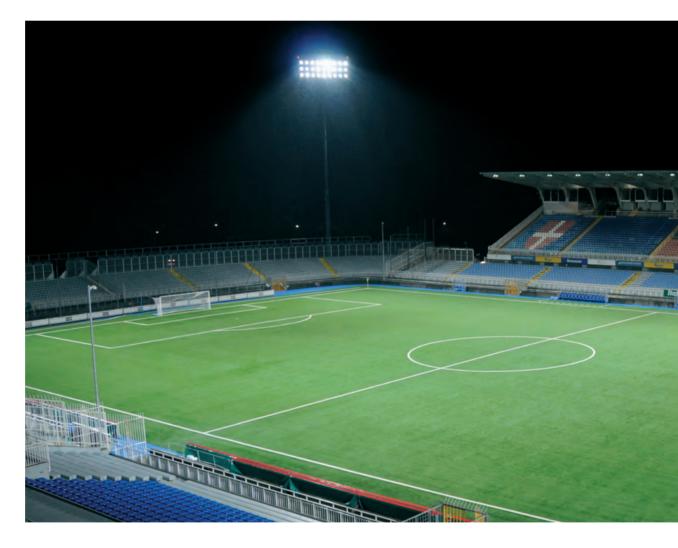
















References Forum/Forum HP

Bellinzona Stadium Switzerland

Forvalovy Klub Banik Stadium Most - Czech Republic

Arena Kaunas, Lithuania 2011 FIBA Basketball champion-

Ulan Ude Stadium - Russia









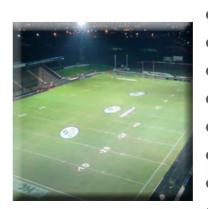




"Le Capannelle" horse race track, Rome - Italy

Tripoli Arena Stadium Libya





Football Stadium Kszo Ostrowiec - Poland

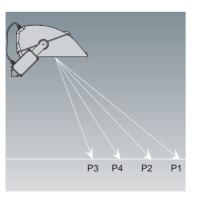
Olimpic Stadium - Stockholm -Sweden

Craven Park Stadium Kingston upon Hull - England

OLYMPIC







Olympic - Flexibility

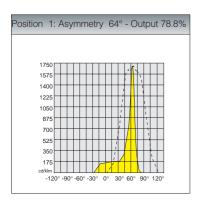
Different lamp directions enable different asymmetric angles, without tilting the floodlights.

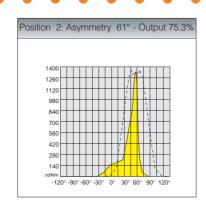
The lampholder Olympic can be adju-

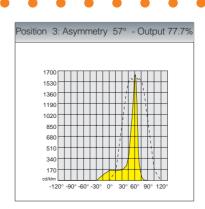
sted in 4 different positions to obtain different light distribution curves.

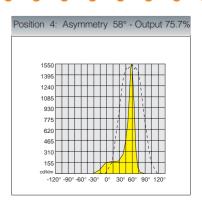


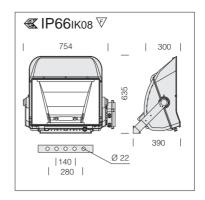




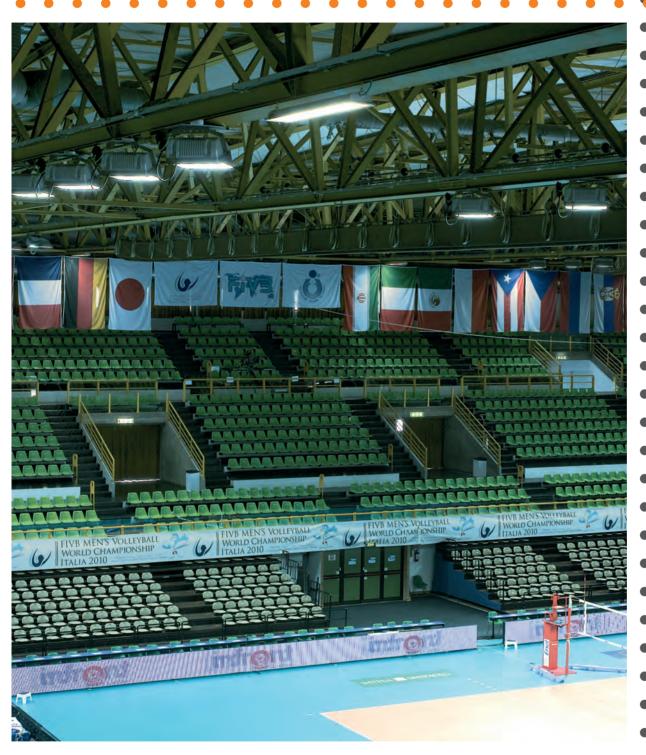












HIGH OPTICAL EFFICIENCY AND GLARE CONTROL

4 ASYMMETRIC BEAMS THAN-KS TO ADJUSTABLE LAMP FO-CUS

UP TO 2 KW METAL HALIDE LAMPS

Housing: die-cast aluminium EN AB 46100.

Cover: die-cast aluminium EN AB 46100 with cooling fins. Rear lamp housing access. Hinge opening with stainless steel latches.

Reflector: asymmetric, in polished aluminium, anodically oxidized and polished, with flux recovery. Allows 4 different photometric distributions.

Diffuser: tempered glass, 5mm thick, thermal shock and impact resistant (UNI EN 121 50-1:2001 tests). 20° tilt glass angle for high asymmetric louvre efficiency and excellent output.

Coating: polyester-resin powder coating, resistant to corrosion and saline environments.

Lampholder: adjustable in 4 different positions that allow changing photometric distribution based on the type of installation.

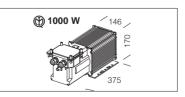
Electric gear: 230V/50Hz (1000W) or 400V (2000W) power supply. Hard wire terminated with quick connection admiralty brass clamps, PTFE section 1.5 mm². 2P+T terminal block, maximum allowed lead cross section 6 mm².

Standard supply: tool-free maintenance. A knife switch cuts the power supply during maintenance operations

Equipment: silicone rubber gasket. Nylon cable gland, ½ Gas thread. Galvanized steel bracket with protractor scale. Stainless steel screws. Air circulation valve.

Long arc la	JM-TS/LA cabl	THE THE	
	Flux	K	Ra
JM-TS 1000 230V	90000lm	5600K	90
JM-TS 2000 400V	190000lm	5600K	90
JM-TS 2000 400V	230000lm	4200K	65

E 40 Lamps	JM-TMT ■□□□□□ E40		n
	Flux	K	Ra
JM-T 1000	90000lm	4400K	1b



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acc.	117	'6 wiring I	DC IP66		
JM-T/TS 1000					
Aluminium	box.	Contents:	ballast	and	
canacitor (withou	it ignitor)			

acc. 117	6 wiring I	DC IP66			
JM-TS 2000					
Aluminium box.	Contents:	ballast	and		
capacitor (withou	ıt ignitor).				

MINI-OLYMPIC asymmetric narrow beam asymmetric wide beam

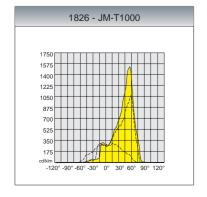


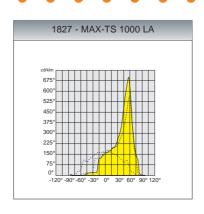
Golf & Country Club, Zagreb - Croatia

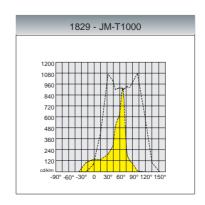


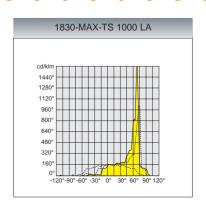
Battaglini Stadium, Rovigo - Italy



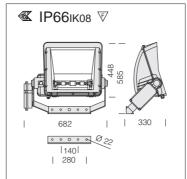
















Skiing World Championships 2010 - Cortina d'Ampezzo - Belluno - Italy





HIGH OPTICAL EFFICIENCY AND GLARE CONTROL

2 ASYMMETRIC BEAMS

UP TO 1 KW METAL HALIDE LAMPS, ALSO INTEGRATED

LAMP OPTION FOR MODERATE OR HIGH CRI (AMATEUR OR CTV BROADCASTING)

Housing/cover: in die-cast aluminium with cooling fins. Hinge opening, stainless steel sealing latches.

Reflector: asymmetric, in hammered aluminium, anodically oxidized and polished with 53° tilt angle.

Diffuser: tempered glass, 5 mm thick, resistant to thermal shocks and impacts (UNI EN 12150-1:2001 tests). Glass tilted by 18° to obtain excellent asymmetric efficiency and intensity.

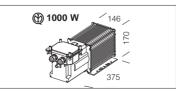
Coating: polyester based resin powder, resistant to corrosion and saline environments.

Standard supply: tool-free maintenance operations. Knife switch to cut off the power supply during maintenance.

Equipment: silicone rubber gasket. 1/2 Gas nylon cable gland. Galvanized steel bracket coated with protractor. Air recycle valve.

Short arc	JM-TS/SAMD		
	Flux	Ra	
JM-TS 1000 230V	90000lm	5900K	Ra 1a
JM-TS 2000 400V	200000lm	5900K	Ra 1a
JM-TS 2000 400V	220000lm	5900K	Ra 1a

E 40 Lamps	JM/SAP-TMT ■B—— E40		
	Flux	K	Ra
JM-T 400	90000lm	4400K	1b
JM-T 1000	90000lm	4400K	1b
SAP-T 400	48000lm	2000K	4
SAP-T 600	90000lm	2000K	4
SAP-T 1000	130000lm	20000K	4



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JM-T/TS SAP-T 1000									
A 1							- 11		

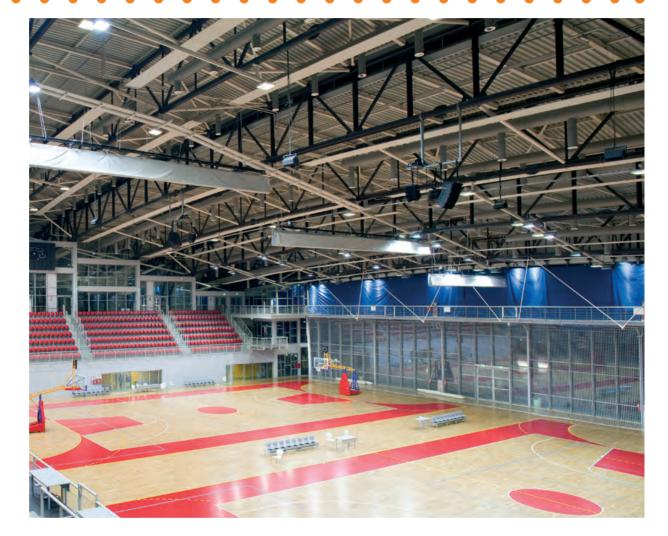
Aluminium box. Contents: ballast and capacitor (without ignitor).















References Olympic / Mini-Olympic

Arena Bilbao - Spain

BL Group - Russia

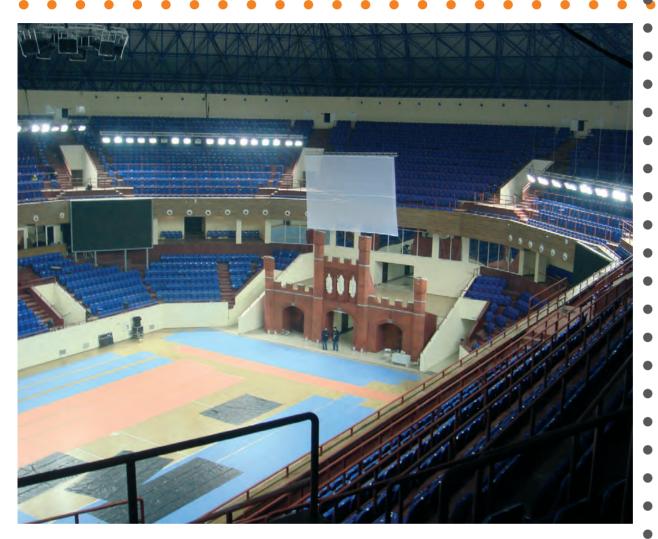
Pala Sojourner - Rieti - Italy

Dvorana Zatika - Porec - Croatia

Le Phare - Chambery - France

Kaliningrad sports arena - Russia

Sports arena - Ragusa - Italy



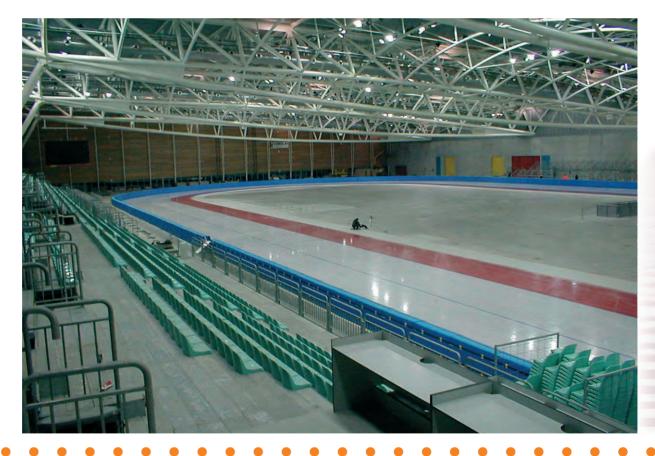


AREA symmetric

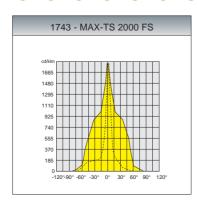
Palaoval, Turin - Italy - Winter Olympic games 2006

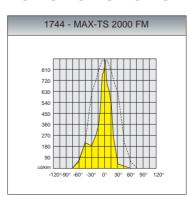


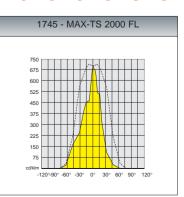


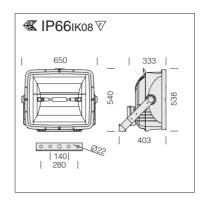
















HIGH OPTICAL EFFICIENCY

3 SYMMETRIC BEAMS

Housing/frame: die-cast aluminium (ENAB 46-100) with cooling fins.

UP TO 2 KW METAL HALIDE LAMPS, HORIZONTAL POSITION

Reflector: polished 99.85 aluminium, anodised and polished, with light beam recovering fin.

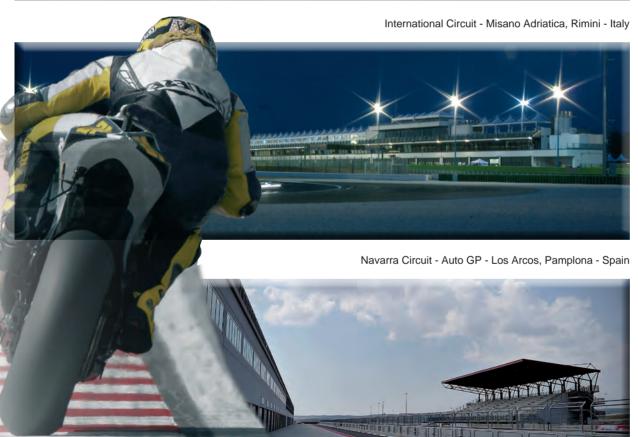
Diffuser: 5 mm tempered glass, resistant to impact and thermal shock (UNI 12150-1: 2001 tests).

Coating: with silver or graphite grey polyester powder, resistant to corrosive and saline environments.

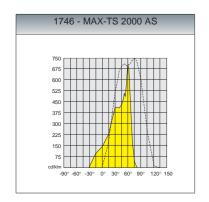
Electric gear: power supply 400V (2000W) and 230V (1000W). Wire terminated with admiralty brass clamps, PTFE insulation section 1.5 mm². 2P+T nylon terminal block (maximum allowed lead cross-section: 6 sqmm).

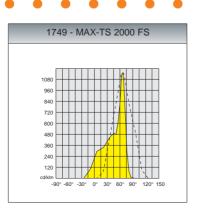
Standard features: it is possible to perform maintenance without using tools through the hinged opening at the rear of the fixture. Equipped with an air-circulation valve.

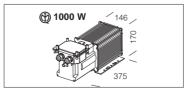
Equipment: fibreglass nylon cable gland, Ø 1/2" gas. Supplied with knife switch enabling safe lamp replacement. Steel bracket with protractor scale and aiming visor. Retained steel screws with special anticorrosion and anti-gripping treatment.











(b)	2000 W 146/	
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Aluminium box. Contents: ballast and

Aluminium box. Contents: ballast and capacitor (without ignitor).

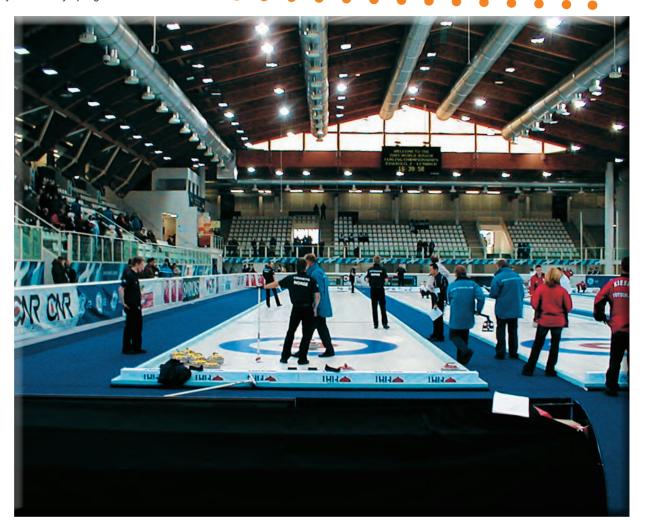
а	cc. 1	176	wiring	DC IP66			
JM-TS 2000							

Aluminium box. Contents: ballast and capacitor (without ignitor).

AREA asymmetric

Curling Club Sporting in Pinerolo, Turin - Italy - Winter olympic games 2006



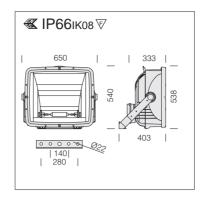






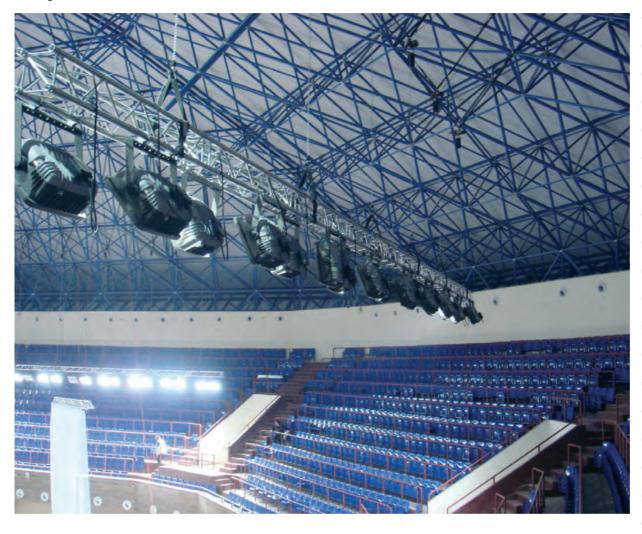
1746 - MAX-TS 2000 AS

750
675
600
525
450
375
300
225
150
75
cdklm
-90° -60° -30° 0° 30° 60° 90° 120° 150





Kaliningrad - Russia



GOOD OPTICAL EFFICIENCY

2 ASYMMETRIC BEAMS

UP TO 2 KW METAL HALIDE LAMPS, HORIZONTAL POSITION

Housing/frame: die-cast aluminium (ENAB 46-100) with cooling fins.

Reflector: asymmetric polished 99.85 aluminium, anodised and polished, with light beam recovering fin. The asymmetric version emits a 60° light flux.

Diffuser: 5 mm tempered glass, resistant to impact and thermal shock (UNI 12150-1: 2001 tests).

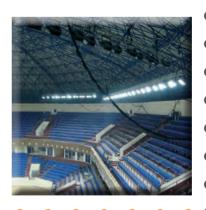
Coating: with silver or graphite grey polyester powder, resistant to corrosive and saline environments.

Electric gear: power supply 400V (2000W) e 230V (1000W). Wire terminated with admiralty brass clamps, PTFE insulation section 1.5 mm². 2P+T nylon terminal block (maximum allowed lead cross-section: 6 sqmm).

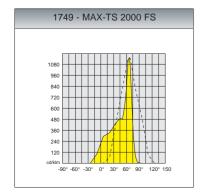
Standard features: it is possible to perform maintenance without using tools through the hinged opening at the rear of the fixture. Equipped with an air-circulation valve.

Equipment: fibreglass nylon cable gland, Ø 1/2" gas. Supplied with knife switch enabling safe lamp replacement. Steel bracket with protractor scale and aiming visor.

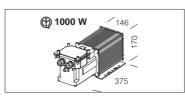




Long arc lar		JM-TS/LAMD cable			
	flux	K	Ra		
JM-TS 1000 230V	90000	5600K	90		
JM-TS 2000 400V	190000	5600K	90		
JM-TS 2000 400V	230000	4200K	65		
JM-TS 2000					







① 2000 W 146/	
170	
490	

acc. 1176 wiring DC IP66 JM-TS/SAP-T 1000

Aluminium box. Contents: ballast and capacitor (without ignitor).

acc.	1176	wiring	DC	IP66			
JM-TS 2000							

Aluminium box. Contents: ballast and capacitor (without ignitor).

















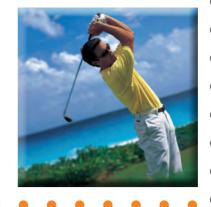




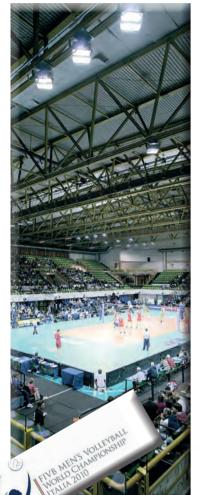








References







Stadio Piola, Novara - Italy

Tennis Club A. Bonacossa Milan - Italy

Swimming Pool Arezzo - Italy

Baseball field Gavagnin di Montorio Veronese Verona - Italy

Alicante multisports centre Spain

Swimming Stadium - Hanoi - Vietnam

Olympic Village -Olympics 2004 - Athens - Greece

Multi-purpose sports facility Handball Championship Porec - Croatia

PalaPanini, Modena - Italy - Volleyball World Championship

Ski Track at Bielmonte Biella - Italy

Golf Course Beijing - People's Republic of China

Val di Fiemme Ski Tracks Trento - Italy

Adele Golf & Country Club People's Republic of China

Le Phare, Chambery - France

Basket Bilbao, Portugal

Indoor Ski Slope Zoetermeer - The Netherlands

Golf Course Canton - People's Republic of China

CITIC Chang Ping Golf Course Changping - People's Republic of China

Multi-purpose sports facility Handball Championship Porec - Croatia

Winter sports arena Belarus









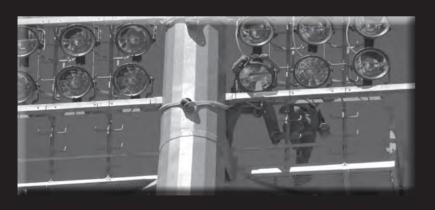


























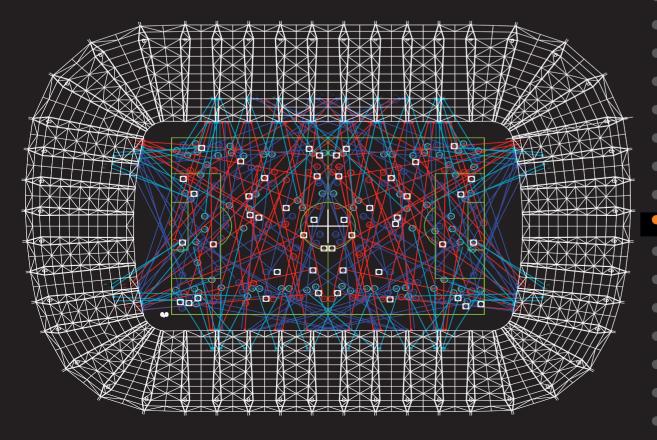
The Disano professional sport lighting range is designed taking in consideration the practical needs of the installation and commissioning procedures.

Mounting elements, accessories, cable entries and many small but important details benefit from the long experience of Disano technical team assisting customers in every corner of the world in commissioning and testing high end sport installations.

Every lighting project made with Disano proprietary lighting software produce specific layout schemes that reduce complexity and make the installation and aiming procedures fully clear, as a concrete support to our customers.

Optical instruments are available by Disano to realize a perfect aiming of symmetrical floodlights.

The Disano team has obtained the sport authority certifications for all the projects shown in this publication.







Short arc lamps and optics

Short arc lamps offer the highest intensity performances, for the situations where high levels of illumination are needed. In these installations performances and beam control are needed in order to optimize all the lighting project parameters including glare control with a minimum waste of energy and light pollution. Short arc lamps are suitable for the 6 optical beams of Forum floodlights. All short arc lamps used by Disano are suitable for CTV broadcasting, the different code represents a different manufacturer, light output and colour may differ from manufacturer.

FORUM HIGH PERFORMANCE - HOT RESTRIKE						
Lamp type	Р	FLUX Im	Colour T	Ra	CTV	Lifespan*
JM TS 2000 - 400 V HO-SB	2000	220.000	5500 K	1b	Υ	4500 h
JM TS 2000 - 400 V HF **	2000	223.000	6000 K	1a	Y	4000 h
** requires a dedicated ballast	·					

FORUM - HOT RESTRIKE						
Lamp type	Р	FLUX Im	Colour T	Ra	CTV	Lifespan*
JM TS 1000 - 230 V	1000	90.000	5900 K	1a	Υ	6000 h
JM TS 2000 - 400 V	2000	200.000	5900 K	1a	Υ	4000 h

OLYMPIC SA/ MINI OLYMPIC SA (1 KW)						
Lamp type	Р	FLUX Im	T couleur	Ra	CTV	Lifespan*
JM TS 1000 - 230 V	1000	90.000	5900 K	1a	Y	6000 h
JM TS 2000 - 400 V	2000	200.000	5900 K	1a	Υ	4000 h

^{*} As indicated by lamp manufacturer and referring to specific measuring standards. Data subject to change as per lamp manufacturer indication.

Long arc lamps and optics

Long arc lamps are designed to operate in horizontal symmetrical or asymmetrical optics, offering a wide choice of neutral and cool white tones and high or moderate colour rendering index. The highest T couleur temperature types are suitable for integration in the same project where short arc lamps are used, by offering an homogeneous colour and a suitable colour index for CTV broadcasting. The versions with neutral colour and lower CRI are most suitable for amateur level or where CTV is not requested.

AREA / OLYMPIC / MINI OLYMPIC (1 KW)							
Lamp type	Р	FLUX Im	Colour T	Ra	CTV	Lifespan*	
JM TS 1000 LA - 230 V	1000	90.000	5600 K	1a	Y	15.000 h	
JM TS 2000 LA - 400 V	2000	190.000	5600 K	1a	Y	13.000 h	
JM TS 2000 LA - 400 V /49	2000	230.000	4200 K	2b	N	8.000 h	

^{*} As indicated by lamp manufacturer and referring to specific measuring standards. Data subject to change as per lamp manufacturer indication.

Edison base (E40) lamps

Edison base lamps are the classical types designed to operate in traditional optics and available in a variety of types, performances and manufacturers.

The Disano range is still used for the amateur or semi professional segment, and for tennis or other situations where the HP sodium is an option.

MINI OLYMPIC / AREA (HPS) / OLYMPIC (1 KW)					
Type de lampe	Р	FLUX Im	T couleur	Ra	CTV
JM T 400	400	42.500	3800 K	2b	N
JM T 1000	1000	90.000	4400 K	1b	Υ
SAPT 400	400	48.000	2000 K	4	N
SAPT 600	600	90.000	2000 K	4	N
SAPT 1000	1000	130.000	2000 K	4	N

FORUM

art: 1156/1186/1195



acc. 1176
wiring DC IP66
JM-T/TS
SAP-T/TS 1000
Aluminium box.
Contents: ballast
and capacitor
(without ignitor).



wiring DC IP66
JM-TS 2000
Aluminium box.
Contents: ballast
and capacitor
(without ignitor).

acc. 1176



gear tray
JM-TS 1000
JM-TS 2000

acc. 1177

Steel gear tray only, no box. Contents: ballast and capacitor.



acc. 112 conveyor

Used for conveying the light beam in a single direction. Can be installed with acc. 111



acc. 111 protective guard

Plastic-coated steel rod. For protection against impact. Can be installed with acc. 112.



baffle louvre

Made of steel.
To reduce glare
and improve
light control.



acc. 163 pole mount

To be used to install up to 4 floodlights on steel poles.

OLYMPIC

art: 1808/1809



wiring DC IP66
JM-T/TS
SAP-T/TS 1000
Aluminium box.
Contents: ballast
and capacitor
(without ignitor).



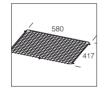
acc. 1176 wiring DC IP66 JM-TS 2000

Aluminium box. Contents: ballast and capacitor (without ignitor).



acc. 1177 gear tray JM-TS 1000 JM-TS 2000

Steel gear tray only, no box. Contents: ballast and capacitor.



acc. 478 protection guard

Plastic-coated steel rod.For protection against impact.



acc. 480 louvre

Made of steel. To reduce glare and improve light control.



acc. 163 pole mount

To be used to install up to 4 floodlights on steel poles.



⊕ 1000 W ∕₁₄₆

MINI-OLYMPIC

art: 1826/27/28/29/30/31

acc. 1176
wiring DC IP66
JM-T/TS
SAP-T/TS 1000
Aluminium box.
Contents: ballast
and capacitor

(without ignitor).

AREA

art: 1743/44/45/46/49



wiring DC IP66
JM-T/TS
SAP-T/TS 1000
Aluminium box.
Contents: ballast
and capacitor
(without ignitor).



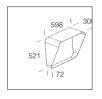
acc. 1176 wiring DC IP66 JM-TS 2000

Aluminium box. Contents: ballast and capacitor (without ignitor).



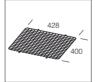
gear tray
JM-TS 1000
JM-TS 2000

Steel gear tray only, no box. Contents: ballast and capacitor.



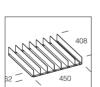
acc. 317 conveyor

Made of steel. Used to direct the light beam in one direction.



acc. 475 protection guard

Stainless steel rod for impact-proof protection.



acc. 476 louvre

Made from steel.
To reduce glaring and direct the light beam more accurately.



acc. 333 pole attach. ø60

Made of aluminium. To be used to apply the fixture on a Ø 60 pole.



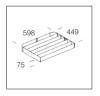
acc. 334 pole attach. ø76

Made of aluminium. To be used to apply the fixture on a Ø 76 pole.



acc. 316 protection guard

Made from steel rods. For protection against impact.



acc. 318 baffle louvre

Made of steel. To reduce glare and improve light control.



acc. 345 tilted bracket

To be used to install Area on platforms with glass parallel to the ground.



acc. 163 pole mount

To be used to install up to 4 floodlights on steel poles.



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