



italkrane

THE HIGHEST LEVEL OF EXPLOSION PROTECTION

“ROLL ALONG” WHEEL SETS



italkrane s.r.l.

Italkrane was founded in Milan in 1962 by Enzo Banfi and Giovanni Penati who were until 2015 respectively the Managing Director and the Chairman of the Company. The object of the company is the design, construction and commercialisation of lifting and transport equipment. The founding members of the company already had a vast technical and commercial experience acquired during many years at responsible levels in a company at the time market leader in the sector. The founding members wanted to establish a factory which would be able to revolutionise the then currently out-dated techniques of production of bridge cranes and electric hoists and to make innovative, scrupulously designed machinery and equipment using new and advanced technologies. At the beginning, priority was given to the construction of electromechanical parts only with consulting services enabling the client himself to build the supporting metal structures in such a way that modern and efficient plant could be made. After five years, the company transferred its offices to a site outside Milan, where facilities were available for metal carpentry work and complete equipment could be supplied. The site in Bussero (15 Km east of Milan) comprises a modern factory and separate office-building studied to-give the greatest pleasure from an ecological point of view and to be perfectly in harmony with the surrounding habitat. Since 1962, Italkrane supports customers in every phase of the development and construction of machines through a team of experienced technicians and engineers able to solve any problem. Our experience, gained in over half a century of activity, is a guarantee of reliability and competence. Italkrane also supplies all the components necessary to produce the crane with the exception of the relative structures (available, on request, the technical drawings for the construction of the structures).

Italkrane elaborates and realizes customized projects to satisfy every customer need with efficient solutions.







Roll Along (hereafter also RA) wheel sets are used wherever loads need to be moved. They are therefore used in the construction of cranes, trolleys and handling systems, as well as in specific applications and special projects. Our wheel sets are compact, robust and easy to maintain. For these reasons, they have been internationally appreciated by crane manufacturers and handling system builders for years. Mass production, subject to careful component testing, makes the RA wheel unit a quality-certified product.

Used for a wide variety of solutions, Italkrane's RA wheel assembly is available in seven different sizes for wheel loads from 2,500 kg to 25,000 kg. Thanks to the different mounting configurations, the RA unit can be used universally and flexibly. For specific requirements, our designers in the technical department can develop special customized solutions. Various special designs are available for use under special conditions. The IP 66 degree of protection is required, for example, for outdoor use or in presence of jets of water. Optional guide rollers or the application of derailment protection devices help to increase the safety of the system.

The RA wheel block can also be used in potentially explosive environments. On request, it is possible to obtain the complete wheel block series in explosion-proof version for Zone 1, Zone 2, Zone 21 and Zone 22. In this case, the wheels are manufactured with a high thickness rolling band made of a special bronze-aluminum alloy which, in addition to guaranteeing the absence of sparks during use, ensures a long service life. This is another reason why Italkrane is considered one of the market leaders for explosion-proof lifting technology and crane components.

In concrete terms:

- Seven sizes for wheel loads from 2,500 kg to 25,000 kg;
- Three standard configurations for connection to customer facilities;
- Low-maintenance direct drive with two speeds;
- Robust and durable standard component;
- Shielded, maintenance-free bearings;
- Chrome-plated fixing pins as standard and secured with AISI316 sealing rings;
- Optional with variable-frequency motors (Inverter);
- Optional version with angular drive;
- Optionally in explosion-proof execution according to ATEX and IECEx;
- Other versions on request.

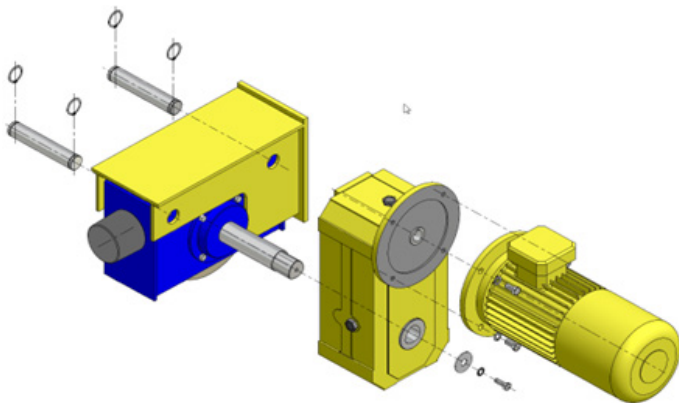
The multiple versions of the Roll Along wheel block cover a wide range of applications. They are adjusted to your specific requirements on request. The travel drives are generally equipped with dual-polarity motors. Thanks to the flexibility of use, resulting from careful design, the Roll Along wheel assemblies are suitable for every type of use.

HOW TO APPLY RA WHEEL SETS ON STRUCTURES

Although the standard product is already of a very good standard, you have the option of making your RA wheel block even safer, cheaper and easier to use with a series of additional mechanical, electrical and electronic components.

This also increases the service life of the wheel blocks. The range of add-on components allows you to improve the performance of the wheel block and adapt it to your personal requirements.

Below are some examples of equipment and options.



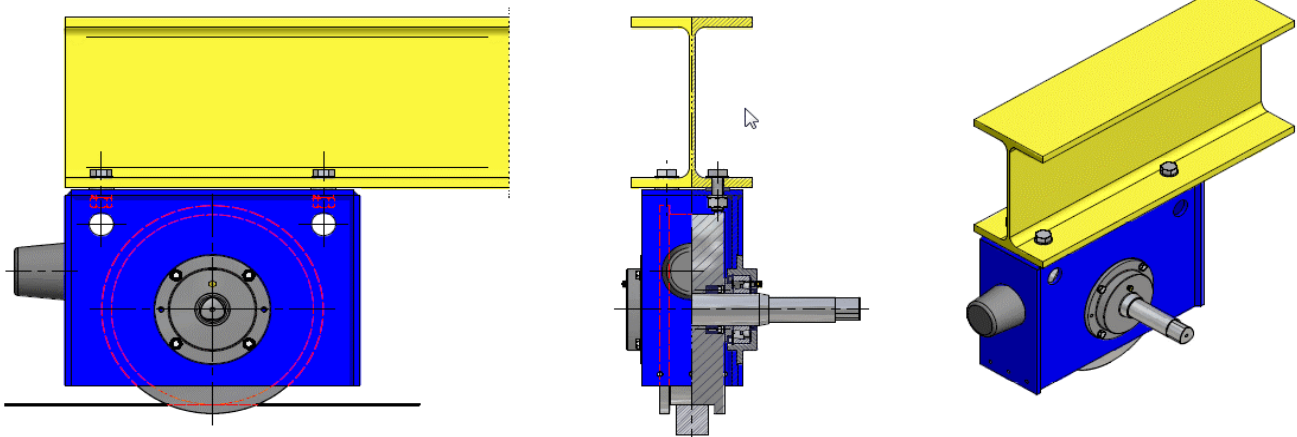
Standard drive (wheel-gear unit)

The travel drive is mounted vertically on the wheel block with a torque support. The standard drive can optionally also be mounted horizontally against the wheel block.

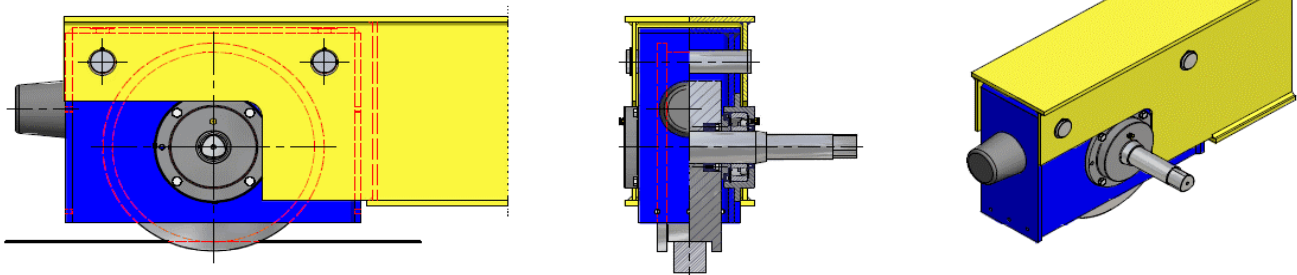
Angular drive

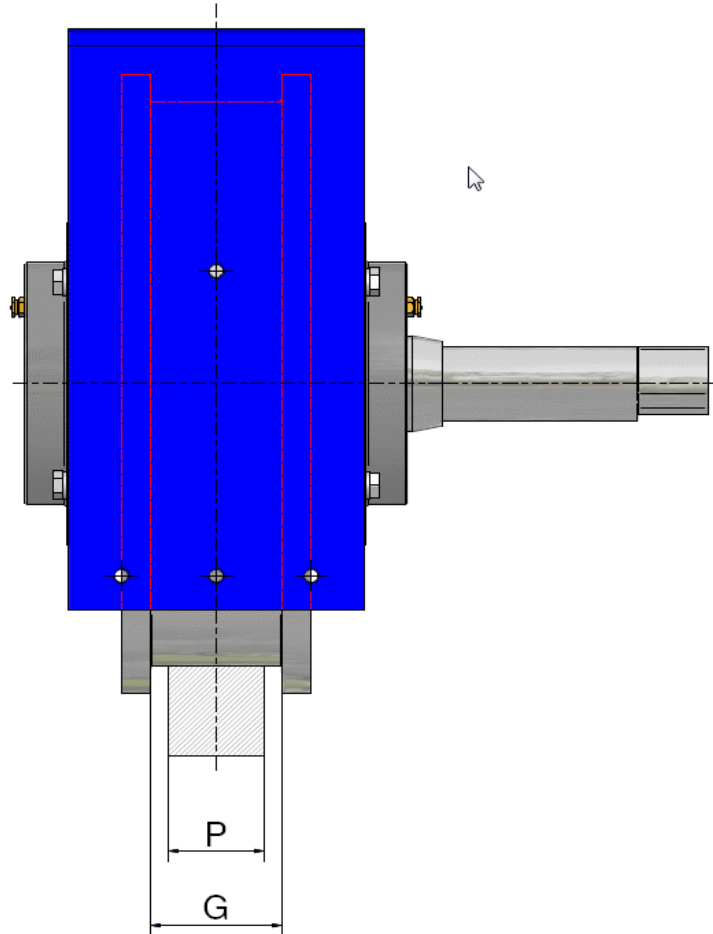
The angle drive saves valuable space and provides optimum accessibility for maintenance work even in tight spaces. It is used, for example, in gantry cranes or storage cranes. All drives, on request, can be supplied with single- or two-speed motors or driven via VFD (inverter).

UNDER-BEAM ASSEMBLY

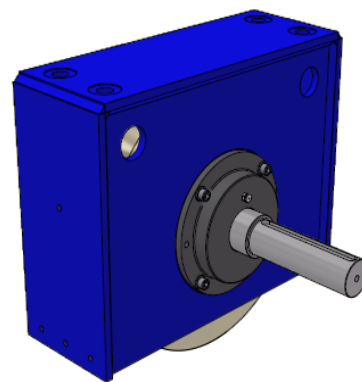
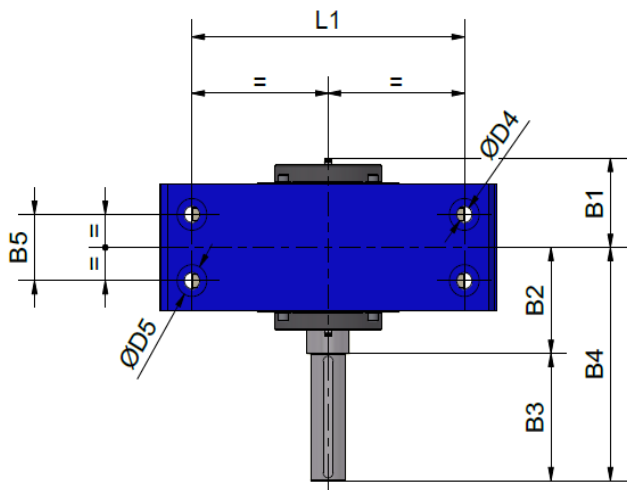
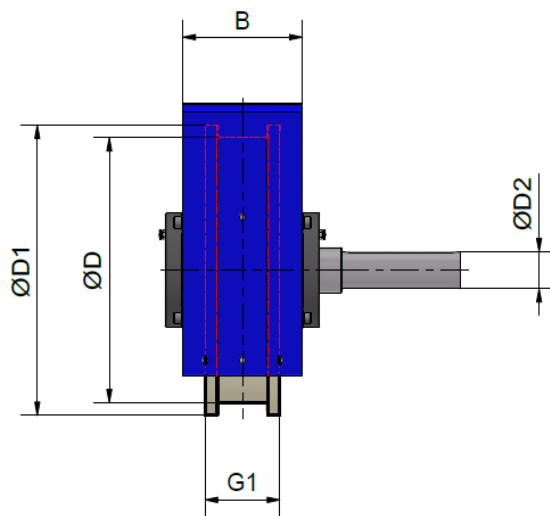
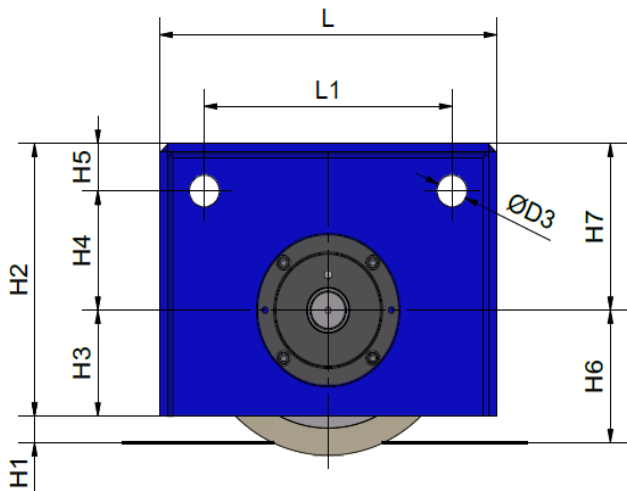


STRADDLE MOUNTING





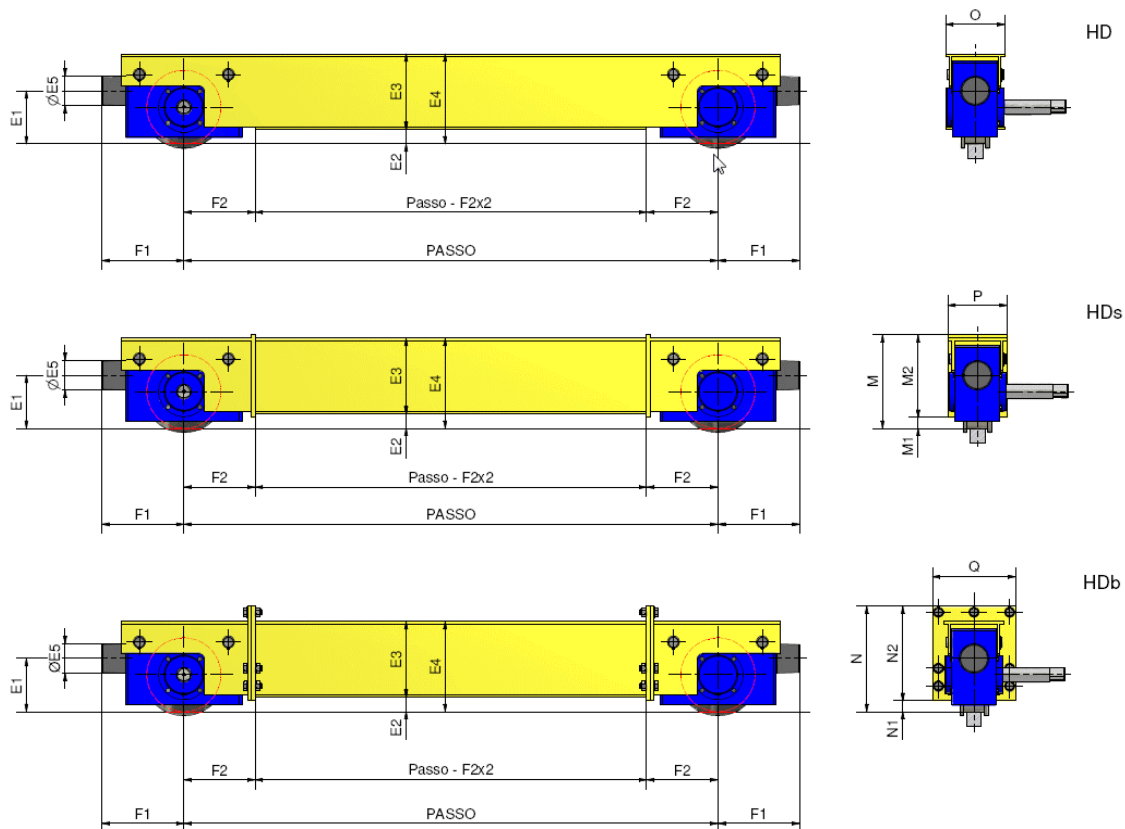
TYPE	R nom. t	R max t	G			P			WEIGHT kg	Ø bumper mm
			S mm	M mm	L mm	S mm	M mm	L mm		
125	2,5	3,5	35	45	65	30	40	50	18	40
160	4	4,5	35	45	70	30	40	50	30	60
200	6	6,7	45	55	75	40	50	60	50	80
250	7,5	9,6	45	55	75	40	50	60	70	100
315	11	12,8	55	65	80	50	60	70	120	120
400	15	18	75	80	100	50	70	80	240	150
500	20	25	80	100	110	70	80	100	450	150



RA	B	B ₁	B ₂	B ₃	B ₄	B ₅	D	D1	D1	D3	D4	D5	G ₁	H ₁	H ₂	H ₃	H ₄	H ₅	H ₆	H ₇	L	L ₁
125	120	75	110	100	210	80	126	148	25	20.25	M12	30.1	85	10	147	53	60	34	63	94	222	170
125	120	75	110	115	225	80	126	148	25	20.25	M12	30.1	85	10	147	53	60	34	63	94	222	170
160	130	80	120	100	220	80	160	182	25	25.25	M14	30.1	85	13	184	67	80	37	80	117	280	220
160	130	80	120	115	235	80	160	182	30	25.25	M14	30.1	85	13	184	67	80	37	80	117	280	220
160	130	80	120	130	250	80	160	228	30	25.25	M14	30.1	85	13	184	67	80	37	80	117	280	220
200	150	90	130	115	245	90	200	228	30	30.25	M16	30.1	95	18	226	82	95	49	100	144	332	250
200	150	90	130	130	260	90	200	228	40	30.25	M16	30.1	95	18	226	82	95	49	100	144	332	250
200	150	90	130	155	285	90	200	278	40	30.25	M16	30.1	95	18	226	82	95	49	100	144	332	250
250	150	100	130	130	260	80	250	278	40	35.25	Ø19	40.1	95	23	258	102	110	46	125	156	392	300
250	150	100	130	155	285	80	250	278	50	35.25	Ø19	40.1	95	23	258	102	110	46	125	156	392	300
250	150	100	130	175	305	80	250	348	50	35.25	Ø19	40.1	95	23	258	102	110	46	125	156	392	300
315	170	110	150	155	305	80	316	348	50	40.25	Ø21	40.1	105	26	330	132	140	58	158	198	462	350
315	170	110	150	175	325	80	316	348	60	40.25	Ø21	40.1	105	26	330	132	140	58	158	198	462	350
315	170	110	150	225	375	80	316	438	60	40.25	Ø21	40.1	105	26	330	132	140	58	158	198	462	350
400	210	130	170	175	345	100	400	438	60	50.25	Ø25	50.1	130	35	412	165	175	72	200	247	584	440
400	210	130	170	225	395	100	400	438	65	50.25	Ø25	50.1	130	35	412	165	175	72	200	247	584	440
500	240	169	200	225	415	115	500	548	65	60.25	Ø31	60.1	160	50	515	200	225	90	250	315	680	500
500	240	169	200	215	405	115	500	548	60	60.25	Ø31	60.1	160	50	515	200	225	90	250	315	680	500
500	240	169	200	240	440	115	500	548	70	60.25	Ø31	60.1	160	50	515	200	225	90	250	315	680	500

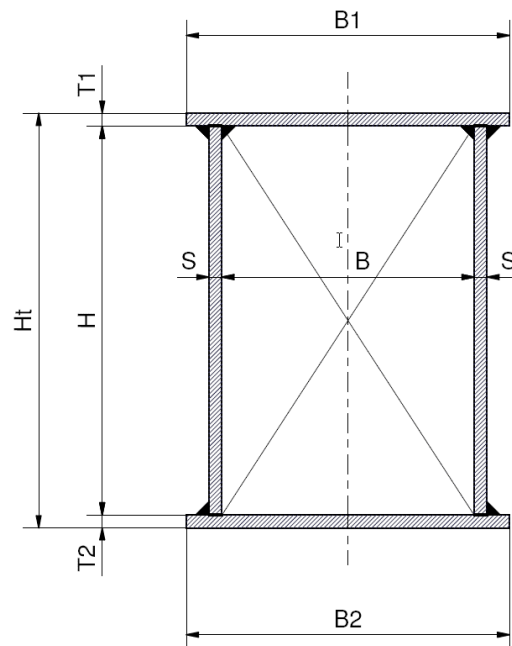
For those who want the complete end carriages, there are several mounting options:

- Under-beam connection: the steel structure is bolted directly to the top of the wheel block.
- HD type connection: the wheel block is inserted into the structure and secured by means of two bolts;
- HDs type (welded) connection: The end of the wheel block is welded directly to the support structure without an intermediate flange;
- HDb type (bolted) connection: The wheel block is connected to the support structure with bolted flanges.



Type	R nom t	R max t	E1 mm	E2 mm	E3 mm	E4 mm	E5 mm	F1 mm	F2 mm	F3 mm	M mm	M1 mm	M2 mm	N mm	N1 mm	N2 mm	O mm	P mm	Q mm
125	2,5	3,5	90	21	152	173	60	161	140	150	182	12	170	212	12	200	160	160	210
160	4	4,5	115	28	192	220	60	190	170	180	229	19	210	259	19	230	180	180	230
200	6	6,7	140	34	216	260	80	230	190	210	272	22	250	307	22	285	200	200	265
250	7,5	9,6	180	49	266	315	100	275	220	240	327	37	290	357	37	320	200	200	280
315	11	12,8	225	63	320	383	120	330	270	285	398	48	350	448	48	400	240	240	320
400	15	18	285	75	400	475	150	420	350	350	490	60	430	550	60	490	280	280	380
500	20	25	350	95	530	625	150	490	435	435	615	65	550	695	65	630	320	320	430

STANDARD SECTIONS HEADED BEAMS



TYPE	B mm	B1 mm	B2 mm	H mm	Ht mm	S mm	T1 mm	T2 mm	W _x cm ³	W _y cm ³	Weight kg/m
125	125	160	160	140	152	6	6	6	171	141	28
160	140	180	180	180	192	6	6	6	255	193	34
200	160	200	200	200	216	8	8	8	419	333	50
250	160	200	200	250	266	8	8	8	557	389	56
315	180	250	250	300	320	10	10	10	1032	642	85
400	220	300	300	400	420	10	10	10	1709	1006	108
500	260	300	300	500	530	10	15	15	3039	1666	147

The technology

The maintenance-free standard components of the modular wheel assemblies ensure high performance, long service life and high efficiency through careful design. An important feature of this wheel unit is the simple, universal and flexible assembly, ensured by the coupling solutions to the supporting structure.

Shaft-wheel connection is achieved through the use of friction locking elements that make disassembly operations easy and increase the service life of the system. Standard shafts made with polygonal profile DIN 32711, that avoids damaging notches caused by keyways or splines, as well as facilitating disassembly even after many years of service.

Anyhow, shafts made with keyways UNI 6604 / DIN 6885 are available on request.



Housing

- High quality due to in-house production.
- Dimensions proportional to different wheel loads.
- Bumper supplied as standard.

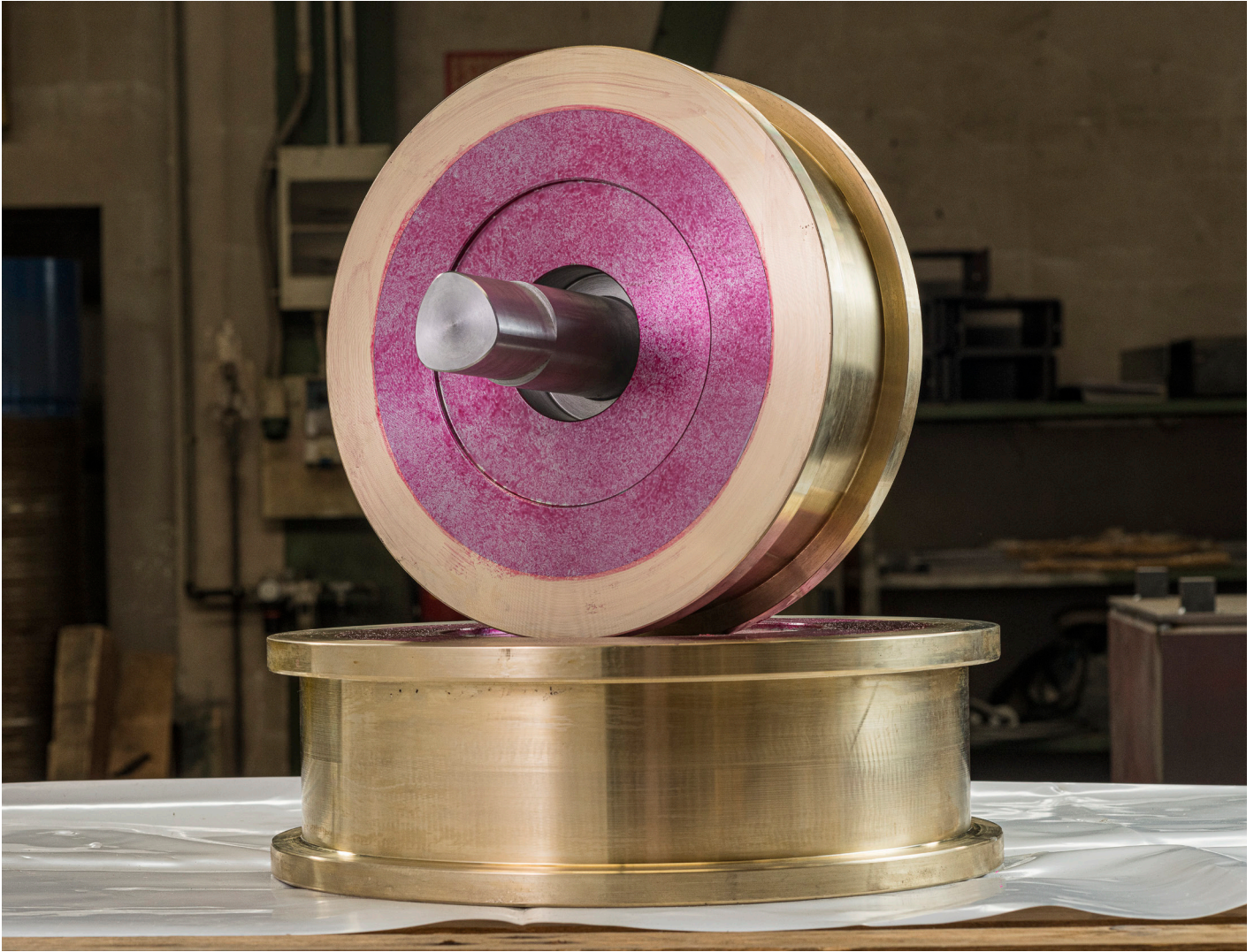
Wheel

- Made of C40 carbon steel for Safe Area versions or bronze-aluminum for non-sparking version;
- Flange-guided on both sides.
- Noiseless operation, low wear of rail.
- Low wear and resistance thanks to self-lubrication.
- Maintenance-free bearings due to lifetime lubrication.
- Guide rollers and derailment protection on request.
- Solutions for extra-wide rails, to reduce motion resistance, to reduce skewing forces, to minimize track wear.
- Reduction of cornering forces and wear.
- Flangeless wheel design, the opposite side is equipped with a derailment protection device;
- Larger rail width possible.

Drives

- Two-speed travel motors.
- Low-maintenance direct drive.
- Optionally with single or centralized drive or without drive.
- Optionally with frequency-controlled motors (inverters).

Room temperature		Wheel set
		Inverter
Protezione meccanica secondo EN 60529		
Varnishing		Color
		Corrosion protection
		Final varnish
Bumper		
Drive mounting option		
Travel motors		50 Hz
		60 Hz
Motor voltage		50 Hz
		60 Hz



STANDARD	OPTIONS
-20 °C ÷ +50 °C	-50 °C ÷ +50 °C
-20 °C ÷ +50 °C	
IP 55	IP 66
RAL 5010	Any color
140 µm	According to customer specification
Polyurethane	According to customer specification
Placed in front of the wheel	
Horizontal/Vertical	Angular
Double polarity motors 20/5 o 40/10 m/1'	Frequency control Ratio 1/10
Double polarity motors 25/6,3 o 50/12 m/1'	
380 - 415	Any voltage
440 - 480	



ITALKRANE lifting equipment

Bridge cranes

Electric wire rope hoists

Winches

Special cranes

Chain hoists

Crane kit

Components

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