STEERING AXLES

HYDRAULIC AND ELECTRICAL

BORGHI ASSALI S.r.l.

THE HISTORY

THE HISTORY

The company was born on 4rd January 1971 and was specialized in the design and construction of moulds and equipment for the metal sheet cold deformation.

In 1992 through an international research the company has begun the development of idle steer axles for forklift counterbalance, side loaders, Ground Support Equipment and airport tow tractors.

The innovation and the quality has conquered in a short time the markets all over the world. Beginning from this first experience and taking always advantage of the most modern design technologies the company could develop a wide range of products beginning from the idle steer axles with solutions covered by patents, the company is in fact present in many European and Extra-European countries with beyond 85% of the production.

Since 2009 we have begun the development of motorized wheels with horizontal and vertical motor and recently we have developed a little range of Motorised Transaxles.

TECHNICAL DEPARTMENT AND THE QUALITY

TECHNICAL DEPARTMENT AND THE QUALITY

BUREAU VERITAS
Certification

Certification

BORGHI IVAN SNC

ISO 9001:2008

Scope of supply

Design, production and maintenance
on axles for industrial forklifts and trucks
Design and production of hydraulic cylinders
Production of mechanical parts on client's drawing
Tooling and maintenance of cold-sheared metal sheet

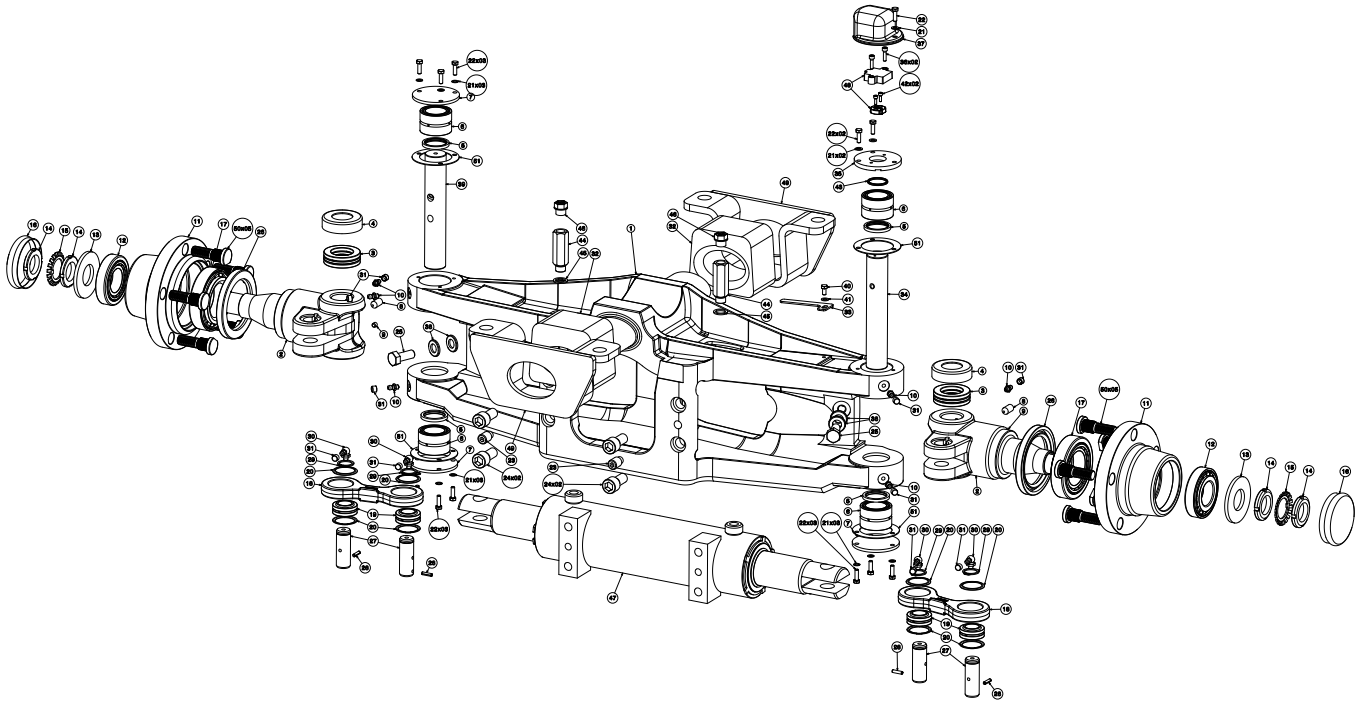
Our technical department is equipped with the most advanced systems for design and calculation with which it can face any demand from customers, preparing special products for the single applications.

The quality control, besides of the inbound and outbound components by means of automatic control systems, ensures the product quality that emphasizes the seriousness of the company and supports the customer guaranteeing completely the choice and the preference given to our production.

We are a certified company ISO 9001 and we are in line with the Italian legal requirements in the field of safety at work.

We are currently achieving the environmental certification ISO 14001 moreover we are working with American companies and we have adhered to the USA standard for antiterrorism called C-TPAT: an initiative of Customs in collaboration with a community of business to ensure the global supply chain.

STEERING AXLES HYDRAULIC AND ELECTRICAL



STEERING AXLES HYDRAULIC AND ELECTRICAL

Borghi Assali was the first to realize that it would be possible to create a forklift 4-wheel able to steer like a normal three-wheel forklift. From this insight, an ingenious steering system was developed, which we call: Total steering. It allows a high steering angle, over 100°, so that the center of rotation of the vehicle coincides with the center line of the front axle. In this way, the maximum dimensions during steering coincide with the dimensions of the cart. Furthermore, this total steering allows the rolling of the rear wheels of the carriage even when the wheels are steered with the machine stopped.

STEERING AXLES
HYDRAULIC AND ELECTRICAL

4R 3,5t
756010000
882010000
552040000
579010000

SWEEPERS

SCRUBBERS

ELECTRIC TOW TRACTOR

AGV

FORKLIFTS

STAKER MAN ON BOARD

ELECTRIC TRACTORS

ELECTRIC VEHICLES

SIDE LOADERS

4 WAY LIFT TRUCK

CRANE

ELECTRIC PICK-UP

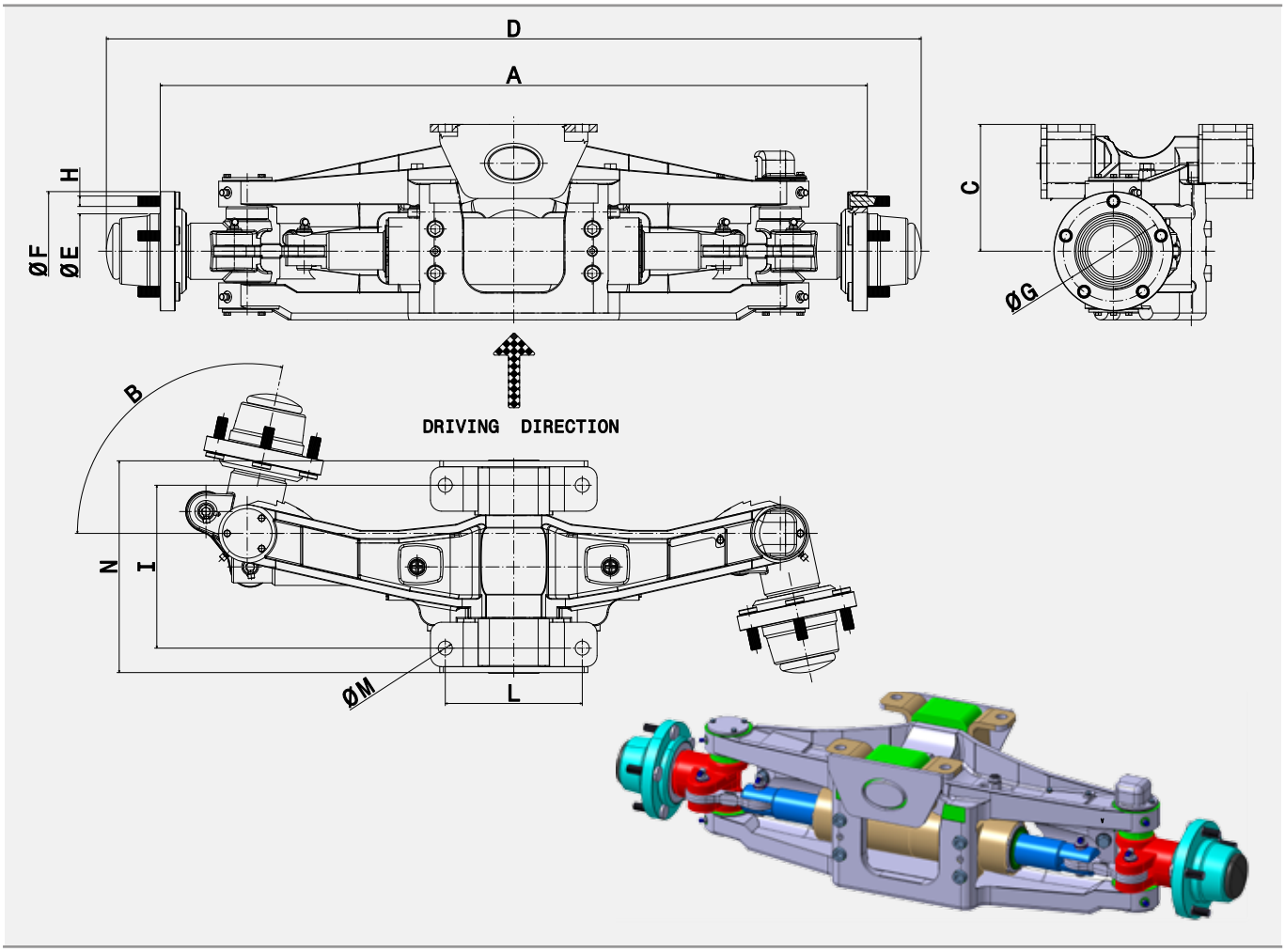
MICRO CAR

ELECTRIC TRUCKS

MINI BUS

TOW TRACTOR

TOTAL STEERING HYDRAULIC AXLES



APPLICATIONS

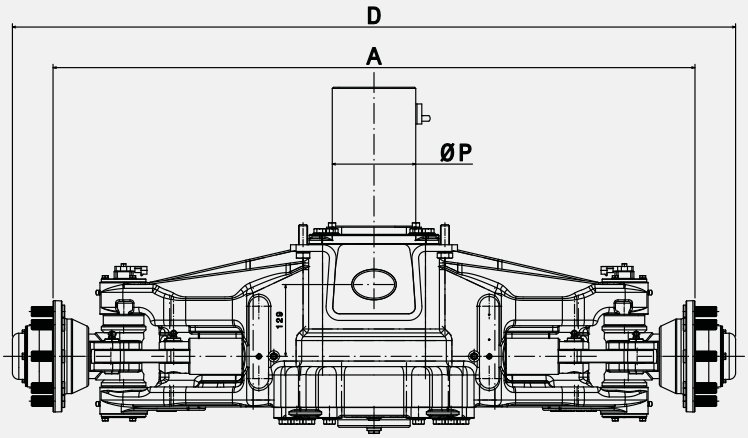
TECHNICAL SPECIFICATIONS

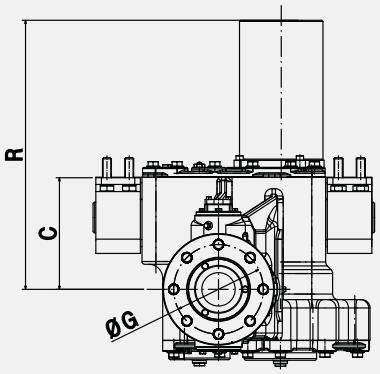
CODE	Load capacity tons	A	B	C	D	ØE	ØF	ØG	H	I	L	ØM	Vehicle wheel base	Suggested tires
466010000	2.3	830	103°	171	975	109.5	170	145	N°5 M14x1.5 stud bolts	171/239	185	N°8xØ15	1386	16x6-8
579010000	2.3	898	103°	/	974	109.5	173	145	N°5 M14x1.5 stud bolts	/	/	/	1516	16x6-8
349020000	2.5	775	94°	112	925	101	170	135	N°5 M14x1.5 stud bolts	214.1	150	N°4xØ16.5	1130	16x6-8
384060000	3.5	830	103°	171	976	113	174	146	N°5 M14x1.5 threaded holes	171/239	185	N°8xØ15	1690	18x7-8
552040000	3.5	955	102°	171	1100	101	161	135	N°5 M14x1.5 stud bolts	220	185	N°4xØ19	1695	18x7-8
291020000	3.5	955	102.6°	171	1100	109	180	148	N°5 M18x1.5 stud bolts	220	185	N°4xØ19	1608	18x7-8
349010000	4.0	1432	100°	166	1580	101	161	135	N°5 M14x1.5 stud bolts	220	185	N°4xØ19	2500	18x7-8
349030000	6.0	1433	97°	223	1579	113	200	161	N°8 M18x1.5 threaded holes	261	160	N°4xØ26	2580	23x9-10
500020000	8.0	1550	91°	/	1588	220	326	275	N°8 M20x1.5 stud bolts	/	/	/	1990	Cushion 559x254

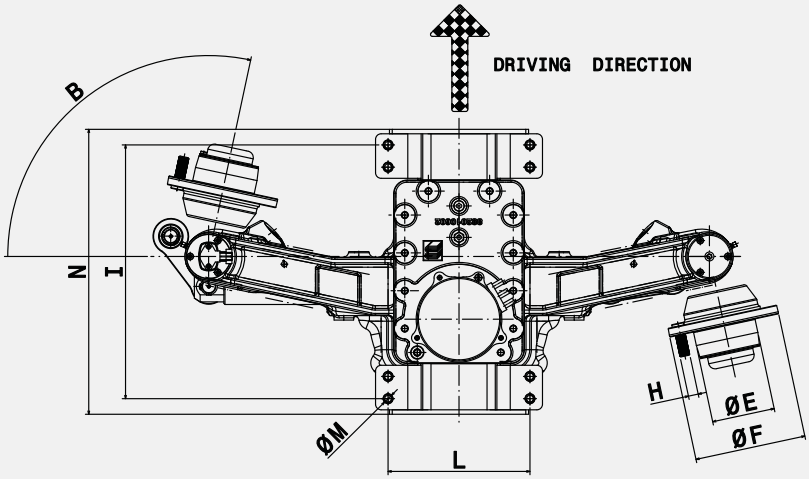
Note: We design and build steering axles customized to our customers' needs. To request a customization contact sales@borghiassali.it

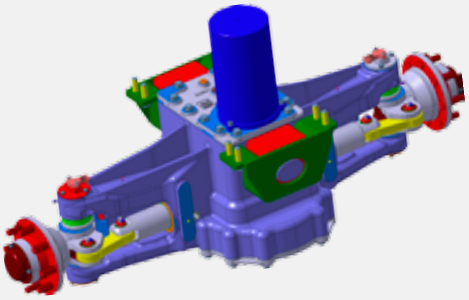
TOTAL STEERING AXLES

ELECTRIC









APPLICATIONS

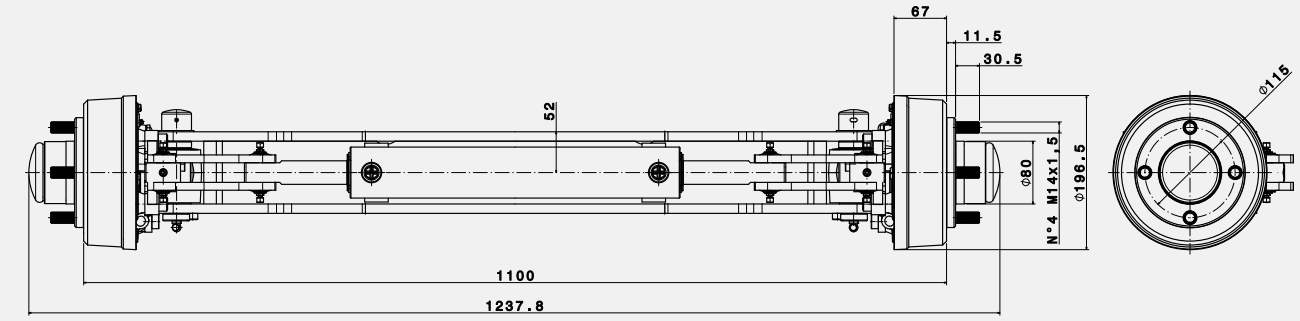
TECHNICAL SPECIFICATIONS

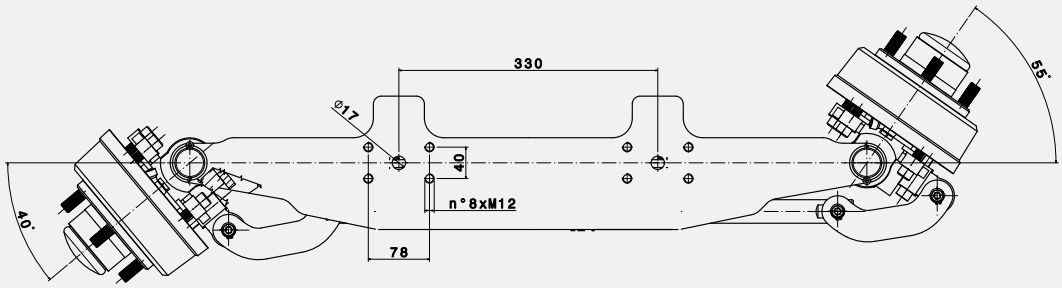
CODE	Load capacity tons	A	B	C	R	ØP	Power	D	ØE	ØF	ØG	H	I	N	L	ØM	Vehicle wheel base	Suggested tires
PV0941	3.5	910	103°	47.5	319	125	0.6 kW - 48 or 80V AC	1057	101	161	135	N°5 M14 threaded holes	415	475	185	N°4xØ19	1613	18x7-8
882010000	6.0	1154	102°	201	483	150	1.0 kW - 48 or 80V AC	1300	113	200	161	N°8 M18x1.5 stud bolts	376/ 456	496	255	N°8xM16	2100	Cushion Ø450x150

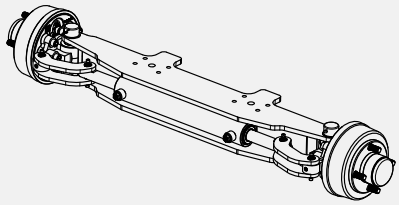
Note: We design and build steering axles customized to our customers' needs. To request a customization contact sales@borghiassali.it

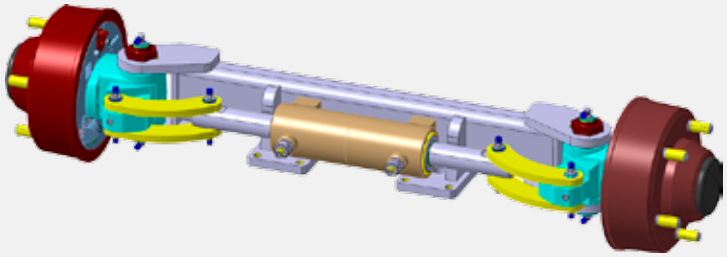
HYDRAULIC STEERING AXLES

LOAD CAPACITY FROM 1.000 KGS TO 3.000 KGS









APPLICATIONS

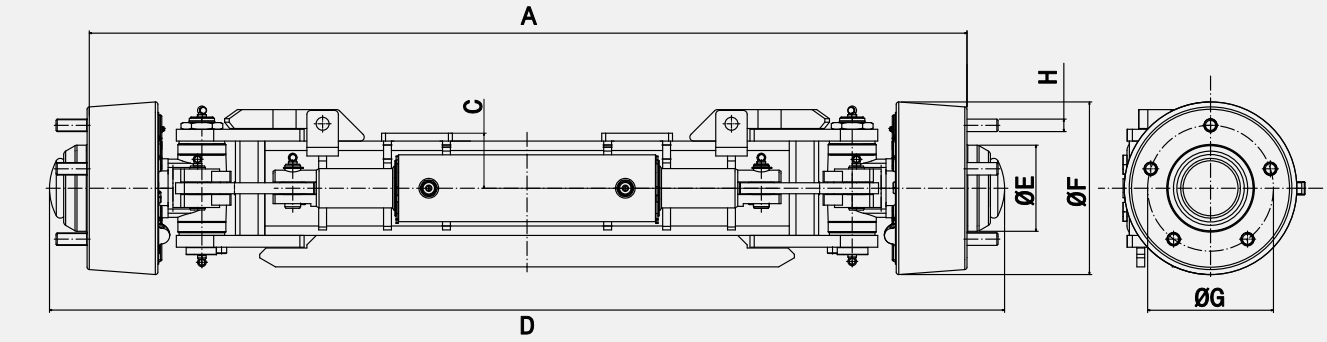
TECHNICAL SPECIFICATIONS

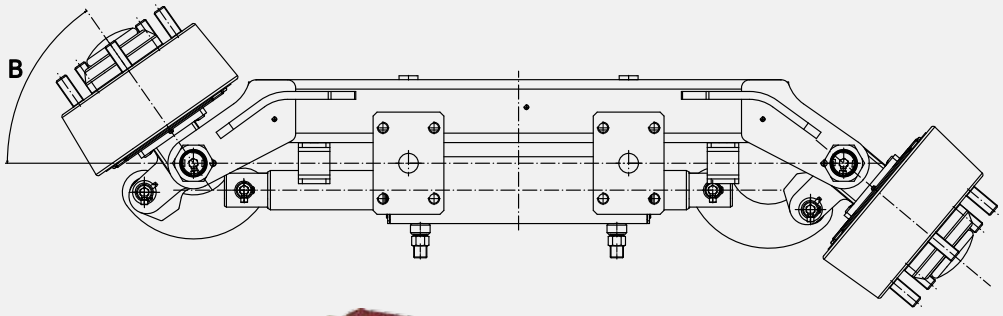
CODE	Load capacity tons	A	B	C	D	ØE	ØF	ØG	H	Vehicle wheel base	Available devices
492020000	1.0	842	55°	52	956	108	196.5	145	N°5 M14x1.5	1140	Drum brakes
628030000	2.0	806	52°	67	940.5	105	196.5	140	N°5 M14x1.5	700	Drum brakes
628040000	2.0	1123	55°	52	1238	80	196.5	115	N°4 M14x1.5	1730	Drum brakes
492030000	3.0	1119	55°	70	1215	109.5	219.5	160	N°5 5/8" UNF	1670	Drum brakes

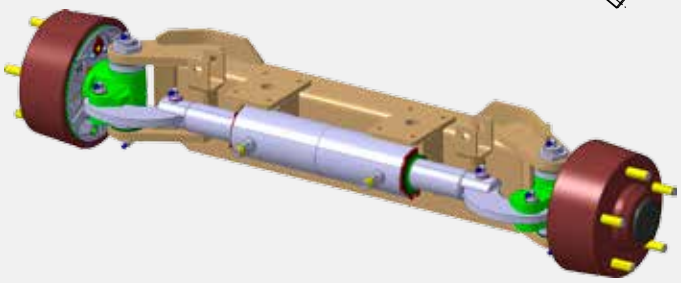
Note: We design and build steering axles customized to our customers' needs. To request a customization contact sales@borghiassali.it

HYDRAULIC STEERING AXLES

LOAD CAPACITY FROM 3.000 KGS TO 5.000 KGS







APPLICATIONS

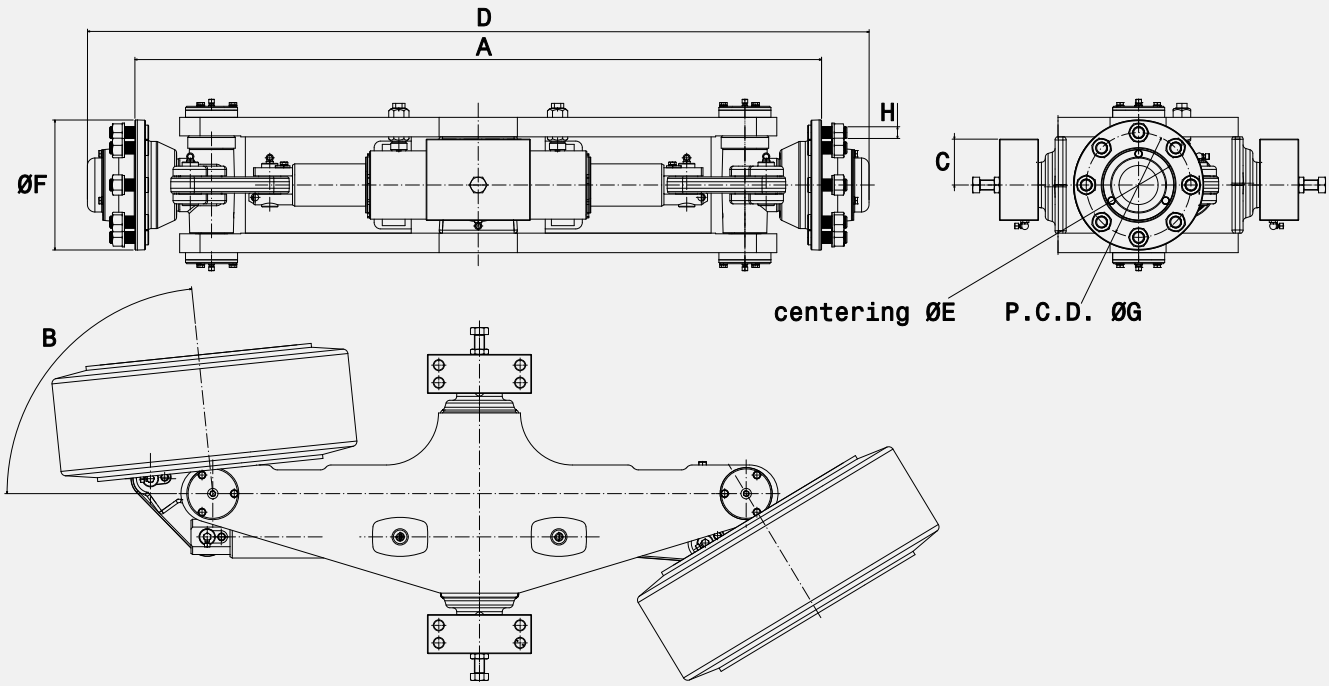
TECHNICAL SPECIFICATIONS

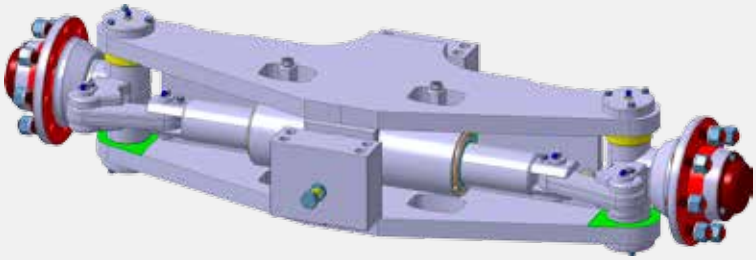
CODE	Load capacity tons	A	B	C	D	ØE	ØF	ØG	H	Vehicle wheel base	Available devices
492070000	4.0	1119	55°	70	1215	109.5	219.5	160	N°5 5/8" UNF stud bolts	1670	Drum brakes
511070000	5.0	1628	75°	/	1789	160	278	205	N°6 M18x1.5 stud bolts	2520	Drum brakes
511080000	5.0	1828	75°	/	1989	160	278	205	N°6 M18x1.5 stud bolts	2520	Drum brakes
511090000	5.0	2028	75°	/	2189	160	278	205	N°6 M18x1.5 stud bolts	2520	Drum brakes

Note: We design and build steering axles customized to our customers' needs. To request a customization contact sales@borghiassali.it

HYDRAULIC STEERING AXLES

LOAD CAPACITY FROM 5.000 KGS TO 9.000 KGS





APPLICATIONS

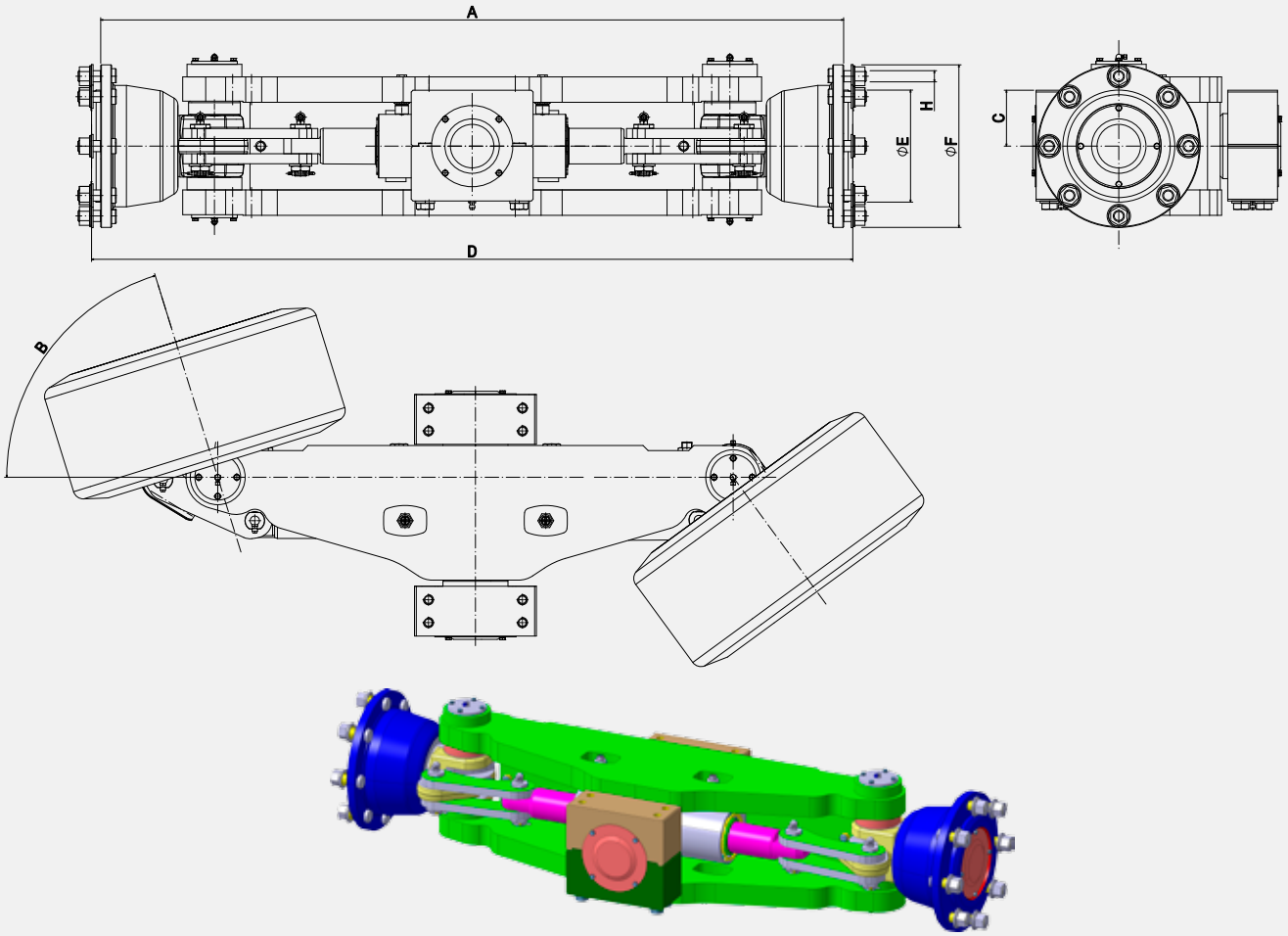
TECHNICAL SPECIFICATIONS

CODE	Load capacity tons	A	B	C	D	ØE	ØF	ØG	H	Vehicle wheel base	Available devices
356060000	5.2	1325	84°	70.5	1452	113	200	161	N°8 M18x1.5 holes	2150	
074080000	5.2	1125	84°	/	1252	113	200	161	N°8 M18x1.5 holes	1750	
845010000	5.2	1055	84°	70.5	1201	113	200	161	N°8 M18x1.5 stud bolts	1640	
500020000	8.0	1550	90°	136	1587	220.5	326	275	N°8 M20x1.5 stud bolts	2000	

Note: We design and build steering axles customized to our customers' needs. To request a customization contact sales@borghiassali.it

HYDRAULIC STEERING AXLES

LOAD CAPACITY FROM 9.000 KGS TO 15.000 KGS



APPLICATIONS

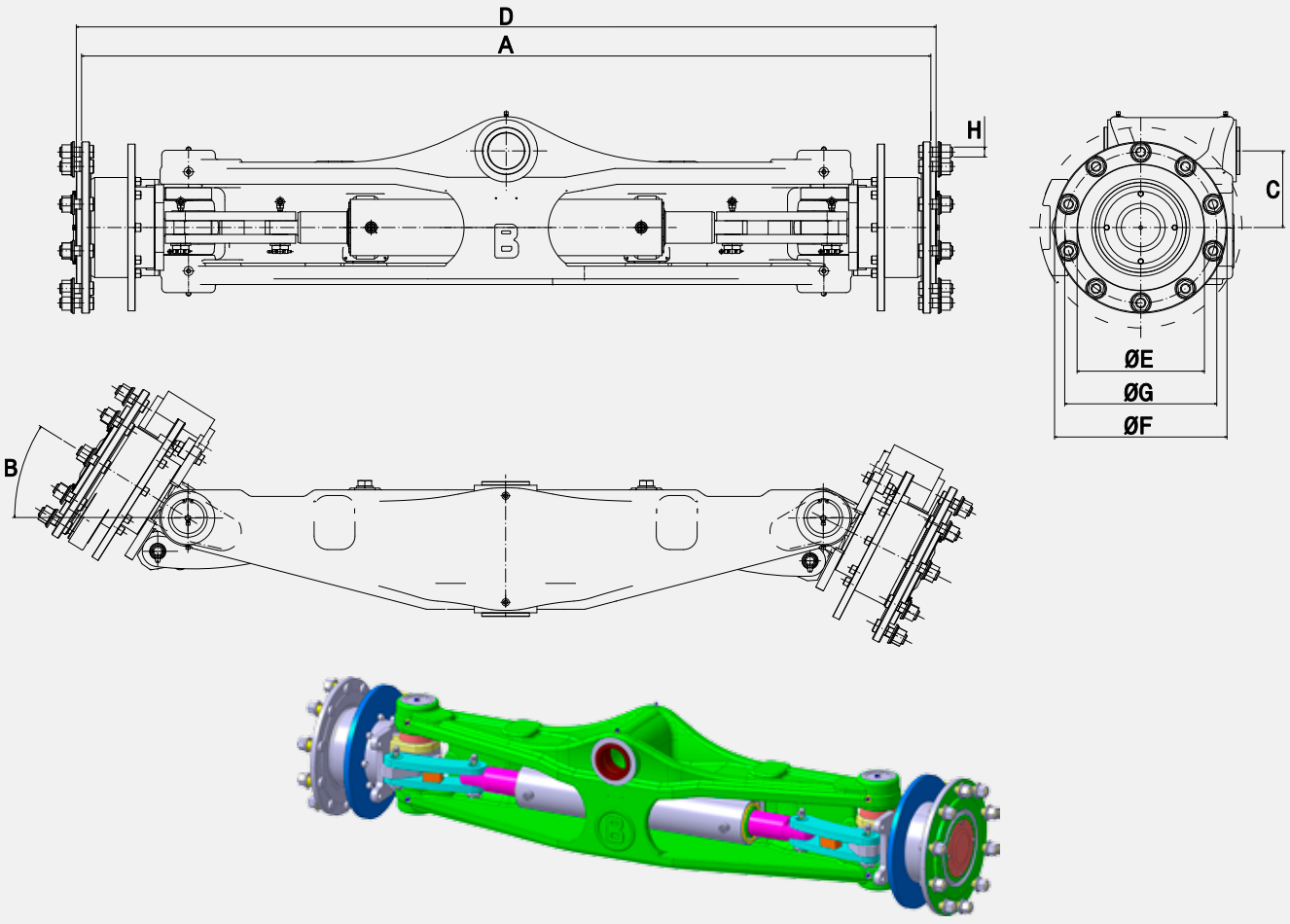
TECHNICAL SPECIFICATIONS

CODE	Load capacity tons	A	B	C	D	ØE	ØF	ØG	H	Vehicle wheel base	Available devices
845040000	11.5	1161	70°	110	1360	220.5	317.5	275	N°8 M22x1.5	1900	/
626010000	14.0	1664	66°	150	1702	220.5	326	275	N°8 M22x1.5	2800	Disk brakes
444010000	14.0	1845	71°	/	/	220.5	326	275	N°8 M22x1.5	4950	Disk brakes
845020000	14.0	1463	73°	110	1552	220.5	320	275	N°8 M22x1.5	2400	/

Note: We design and build steering axles customized to our customers' needs. To request a customization contact sales@borghiassali.it

HYDRAULIC STEERING AXLES

LOAD CAPACITY OVER 15.000 KGS



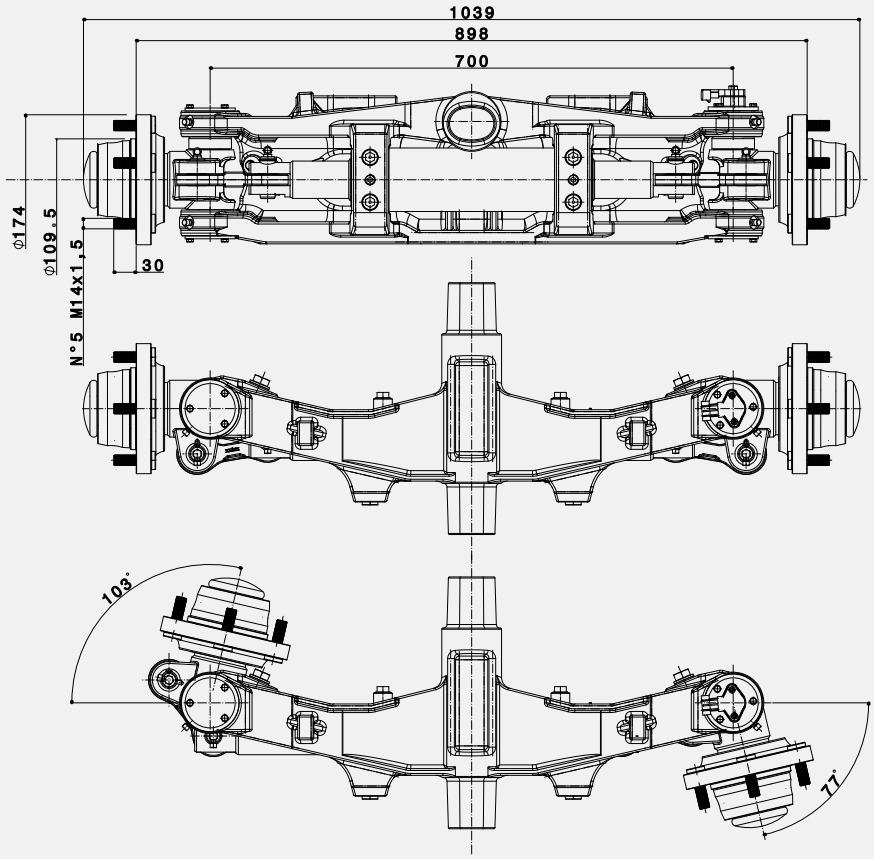
APPLICATIONS

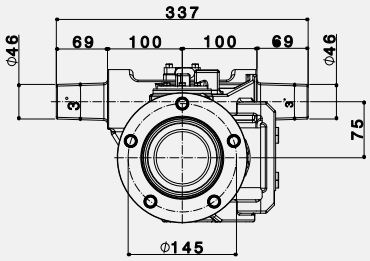
TECHNICAL SPECIFICATIONS

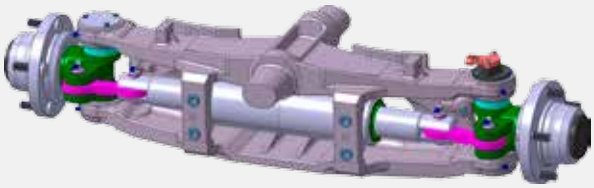
CODE	Load capacity tons	A	B	C	D	ØE	ØF	ØG	H	Vehicle wheel base	Available devices
855010000	16.0	1871	32°	170	1927	280.5	380	335	N°10 m22x1.5 stud bolts	3840	Disk brakes
836010000	16.0	1528	68°	110	1564	220.5	320	275	N°8 m22x1.5 stud bolts	2650	
444050000	17.0	1710	60°	170	1897	220.5	330	275	N°8 m22x1.5 stud bolts	3600	
845050000	18.0	1388	73°	110	1424	220.5	320	275	N°8 m22x1.5 stud bolts	2730	
444080000	20.0	2880	70°	160	3154	280.8	381	335	N°10 m22x1.5 stud bolts	3386	
633030000	40.0	1580	75°	132.7	1994	440	560	500	N°20 m22x1.5 stud bolts	2970	

Note: We design and build steering axles customized to our customers' needs. To request a customization contact sales@borghiassali.it

579010000







APPLICATION

MAX LOAD ON THE WHEEL (Kg) 2500

TECHNICAL SPECIFICATIONS

MAX LOAD ON THE AXLE	2500 Kg
MAX ANGLE STEERING	103° / 77°
ALLOWABLE SIZE TYRE	SUPERELASTIC 16x6x8

CONTACT

info@borghiassali.it - sales@borghiassali.it
WWW.BORGHIASSALI.IT

BORGHI ASSALI S.r.l.

Via Caduti di Navicello, 1
41030 Villavara di Bomporto (Modena) Italy
Phone: 059-909412
Fax: 059-909914