

## Transverse Thrusters



- ▶ 50 kW to 1650 kW
- ► All major classifications
- ► Unrivalled durable gears
- ▶ 4000 thrusters in operation
- ► High-performance FP propellers







Jastram have been developing and producing transverse thrusters since 1950. Reliable gears, worldwide service, direct contact to our service department and detailed archived data for each delivered system are well accepted by the maritime industry and international shipping companies.

Jastram are specialised in fixed pitch propeller (FPP) thrusters which require minimal servicing due to their solidity and durability. To improve performance the propeller design is continuously modified according to the latest developments.

With electric drive systems ranging from the low-cost 3-step control for onshore manoeuvring to the frequency-controlled drive for offshore dynamic positioning Jastram offer transverse thrusters for a wide variety of vessel types.

The following table of Jastram thruster types indicates the maximum speed and power based on a 50Hz / 60Hz power supply and the German Lloyd type approval. 'Max kW' may differ for special applications and requirements of other classification societies.

Туре	Prop Ø mm	Max Input Rpm	Max kW	Max kW Diesel DP*	Thrust approx kN
BU10	620	1.500 1.800	70 83		10 - 12 11 - 13
BU20	840	1.500 1.800	138 165	116 140	18 - 21 20 - 24
BU40	990	1.500 1.800	217 260	187 225	27 - 32 31 - 36
BU50	1.000	1.500	315	315	35 - 41
BU60	1.220	1.500 1.800	510 610	426 510	55 - 65 62 - 73
BU90	1.600	1.500 1.800	583 700	500* 600*	72 - 85 81 - 96
BU100	1.940	1.000 1.200	750 900	688* 825*	97 - 114 109 - 128
BU120	2.270	1.000 1.200	835 1.000	725* 870*	115 - 135 130 - 153
BU140	2.570	1.000 1.200	1.370 1.650	1.165* 1.400*	174 - 205 197 - 232

The given thrust range in kN results from the calculation using the column 'Max kW' and is based on optimised tunnel, inlet cone and fore shapes. The range is influenced by the respective installation design.





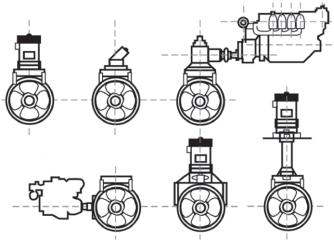


Jastram transverse thrusters are made from high-grade certified materials and are designed individually according to the given installation conditions.

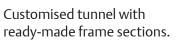
Classification certificates for any classification society can be delivered for the whole thruster system.

Vertical or horizontal mounting or any other installations for electric, hydraulic or diesel engine drives are available.

Drive shaft extensions for restricted space in stern installations and detachable systems for workboats to allow servicing without docking are examples of our ability to meet customer requirements.









Detachable thruster for servicing without docking.



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## **Technical features:**

The propeller is mounted with a tight oil press fit which allows rapid mounting and dismounting during shaft seal changes.

The stainless steel ring in the propeller tip region protects the tunnel against cavitation damage.

The oil lubrication system with oil level sensor (to be installed by the shipyard above waterline) protects the seals against water ingress.

Galvanic cathodic protection (CP) is calculated and installed to protect the system for up to 5 years.

## **Options:**

Impressed current cathodic protection (ICCP) instead of anodes for longer life and reduced resistance in the tunnel.

Anti-suction tunnel (AST) – a second smaller tunnel installed behind the bow thruster to increase the thrust during cruising.

A holding brake to prevent propeller windmilling and noise during passage is recommended. Besides electric motor brakes, hydraulic, pneumatic and electrically driven disk brakes are available for new builds and retrofits.

Condition Monitoring and High Performance Shaft Seals are available for the thruster types BU90, BU100 and BU120. More information in our separate brochure.

## Further Jastram products:



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