

# NORBAR TORQUE TOOLS TORQUE MULTIPLIERS AND TRANSDUCERS FOR USE IN INTERVENTION TOOLS



Norbar gearboxes and transducers are becoming the industry standard for use in sub sea torque intervention tools.

## Available as

- Gearbox only
- Gearbox with integral torque transducer (as shown above)
- Gearbox with separate torque transducer

## Gearbox

- Precision epicyclical gear design for high efficiency in a small, lightweight package
- Supplied specifically for use in pressure compensated oil filled sub sea intervention tools with oil filling/drain holes and no grease
- Various ratios available with maximum output torques from 1000 to 300,000 N.m
- Input and output drives can be provided to customer requirements
- Manufactured from standard Norbar components for trusted reliability and availability of spares
- Reaction can be either bolted or dowled (or combination of both)

## Gearbox with Integral Transducer

- Gearbox specifications as above
- Designed to allow integration into the smallest housing possible to reduce weight and size of complete intervention tool
- Transducer is integral part of the gearbox annulus and is made from stainless steel
- Available for torques up to 3000 N.m and larger capacities on request
- Torque signal output available in mV/V, 4 to 20mA as 2 or 4 wire versions
- Torque accuracy +/- 2% of reading or better
- Supplied with fully traceable bi-directional torque calibration

## Torque Transducers

- Based on the standard range of Norbar Annular transducers but specifically for use in pressure compensated oil filled sub sea intervention tools
- Oil filling/drain holes in sleeve
- All stainless steel construction
- Torque signal output in mV/V
- Supplied with UKAS accredited bi-directional torque certification

For more details on all Norbar products please contact:

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