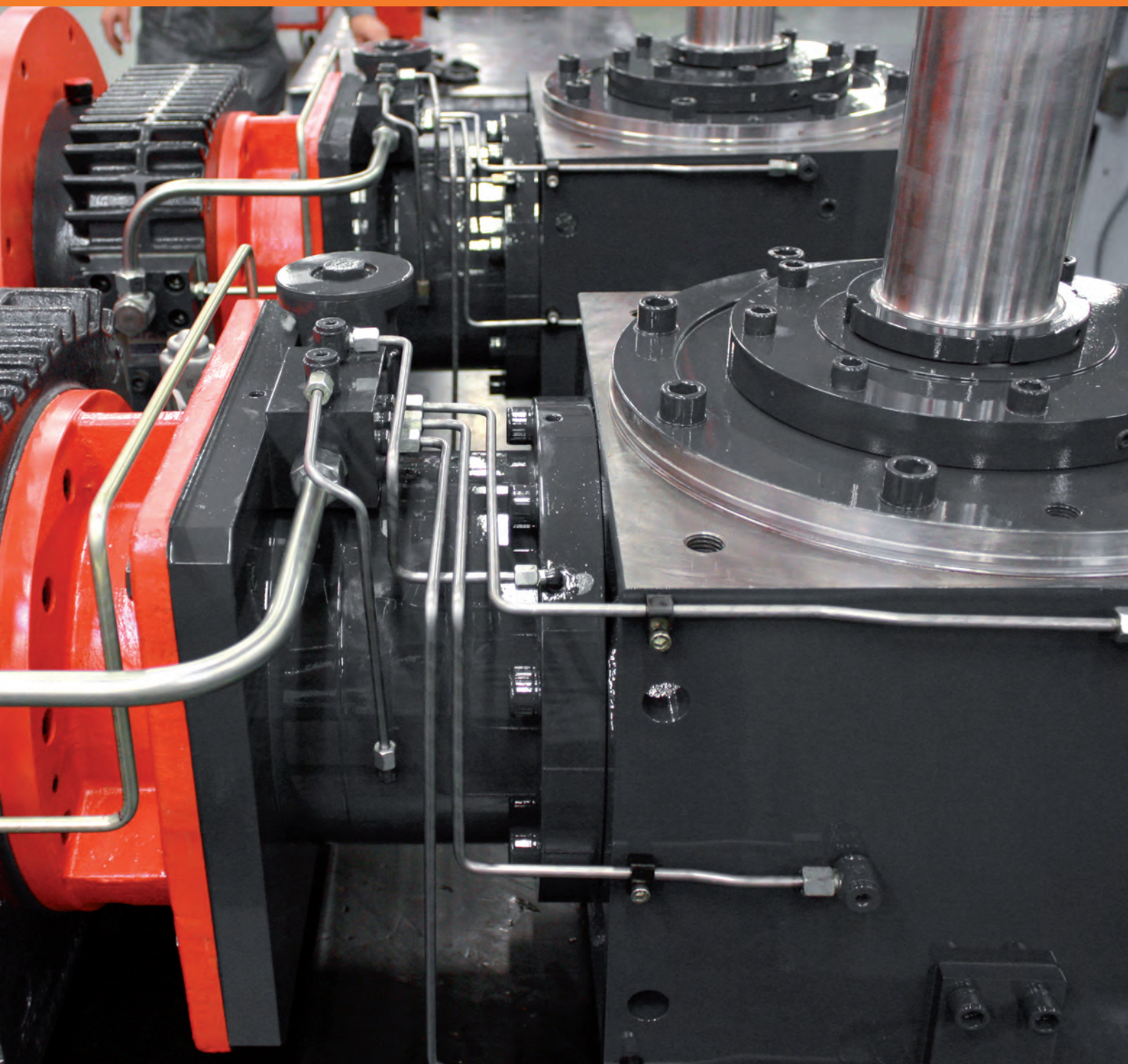
# Turnkey Turntable Drive Solution

# MSR Range

ANDANTEX USA Inc.

REDEX
The Machine-Tool Drives Company



# MSR Range
# Two Speed Gearbox for VTL

## State-of-the art technology

The traditional solution for turn table drive is composed of a main drive (single pinion) for turning operation plus a preloaded gearbox (Dual pinions) for C axis milling operation. This configuration is complex and expensive.

**Power sharing and very high positioning accuracy**

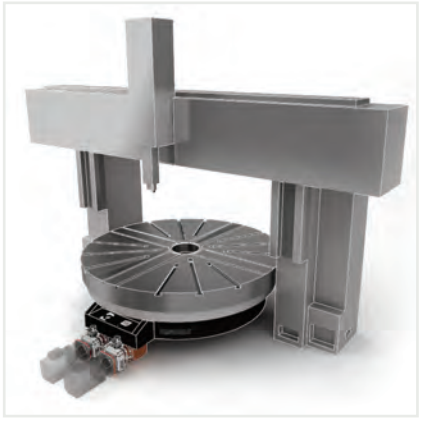
REDEX designers have introduced on the market an innovative solution taking advantage from the latest CNC technology.
Two identical gearboxes (Twin pinions) share the driving torque (50%-50%) during turning operations and work in preload mode when C axis is required (milling operation). Gear ratio shifting allows to cover the full range of speed: high-speed for turning and low speed for milling.

Full load is available during turning and backlash is cancelled during milling !

**A cost effective solution**

The **MSR** Drive is a complete machine-tool subassembly, ready to use and fully tested. It is an integrated and compact system that dramatically simplifies VTL tables kinematics and allows high-performance in terms of speed range and accuracy.

The **MSR** range consists of 4 sizes (330, 640, 650 and 660) with torque capacity per pinion from 2500 Nm up to 12000 Nm with several standard ratios and options available.



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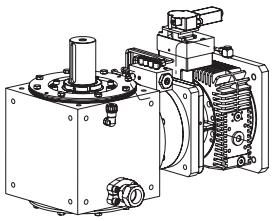
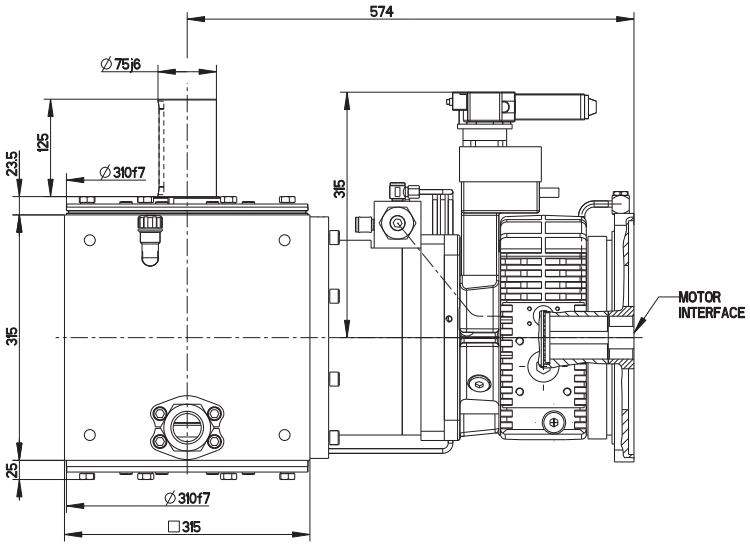
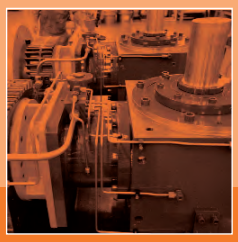
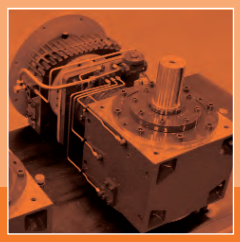
# MSR 330

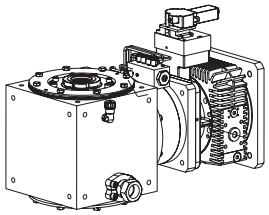


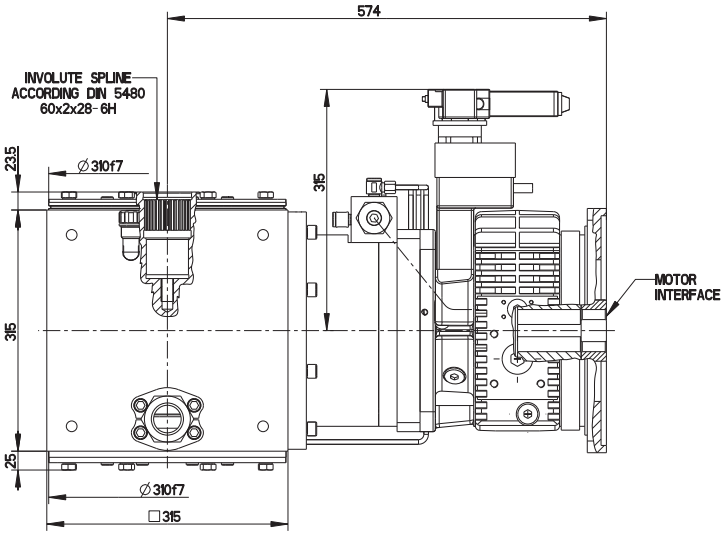



Dimensions and main data for information only, please refer to Product Datasheet

| | | | Plain Shaft | |
|---|---|---|---|---|
| **MODEL** | | | **MSR 334** | **MSR 336** |
| High speed ratio | i1 | - | 2.00 | 2.00 |
| Low speed ratio | i2 | - | 9.88 | 7.66 |
| Rated output torque | T2N | [Nm] | 2500 | 2500 |
| Max. input speed | N1B | [rpm] | 6000 | 6000 |
| Efficiency | η | [%] | 95 | 95 |
| Weight | m | [kg] | 280 | 280 |

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| | | | Hollow Shaft | |
|---|---|---|---|---|
| **MODEL** | | | **MSR 334** | **MSR 336** |
| High speed ratio | i1 | - | 2.00 | 2.00 |
| Low speed ratio | i2 | - | 9.88 | 7.66 |
| Rated output torque | T2N | [Nm] | 2500 | 2500 |
| Max. input speed | N1B | [rpm] | 6000 | 6000 |
| Efficiency | η | [%] | 95 | 95 |
| Weight | m | [kg] | 276 | 276 |

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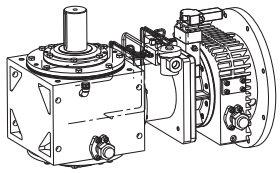
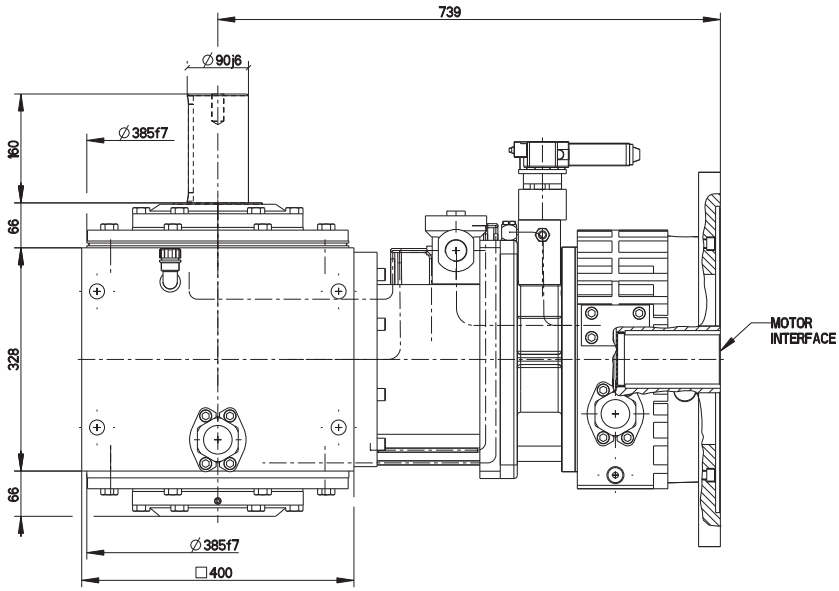
# MSR 640



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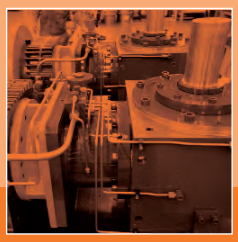
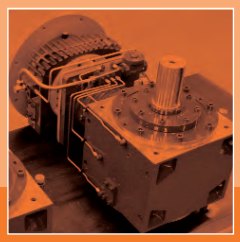
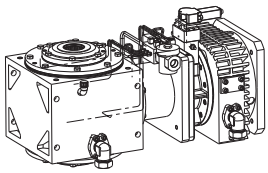
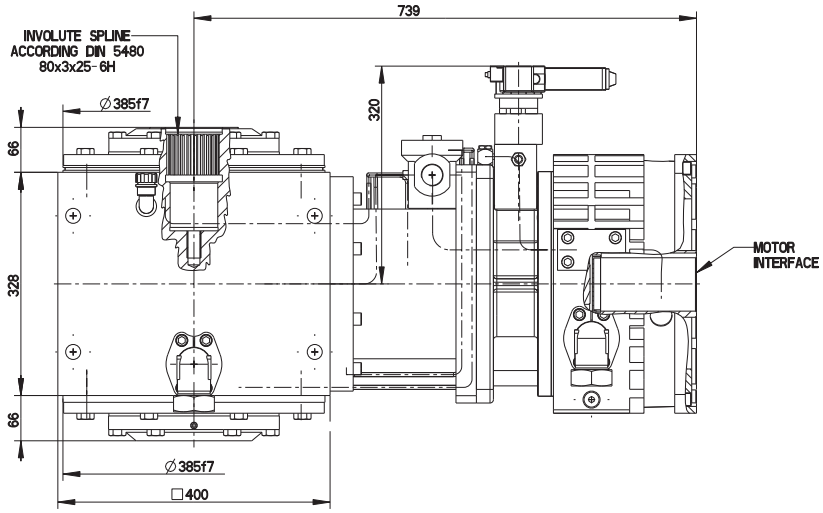
| | | | Plain Shaft | |
|---|---|---|---|---|
| **MODEL** | | | **MSR 644** | **MSR 646** |
| High speed ratio | i1 | - | 2.00 | 2.00 |
| Low speed ratio | i2 | - | 9.88 | 7.66 |
| Rated output torque | T2N | [Nm] | 5900 | 7000 |
| Max. input speed | N1B | [rpm] | 5000 | 5000 |
| Efficiency | η | [%] | 95 | 95 |
| Weight | m | [kg] | 548 | 548 |

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| | | | Hollow Shaft | |
|---|---|---|---|---|
| **MODEL** | | | **MSR 644** | **MSR 646** |
| High speed ratio | i1 | - | 2.00 | 2.00 |
| Low speed ratio | i2 | - | 9.88 | 7.66 |
| Rated output torque | T2N | [Nm] | 5900 | 7000 |
| Max. input speed | N1B | [rpm] | 5000 | 5000 |
| Efficiency | η | [%] | 95 | 95 |
| Weight | m | [kg] | 540 | 540 |

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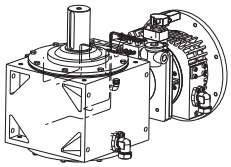
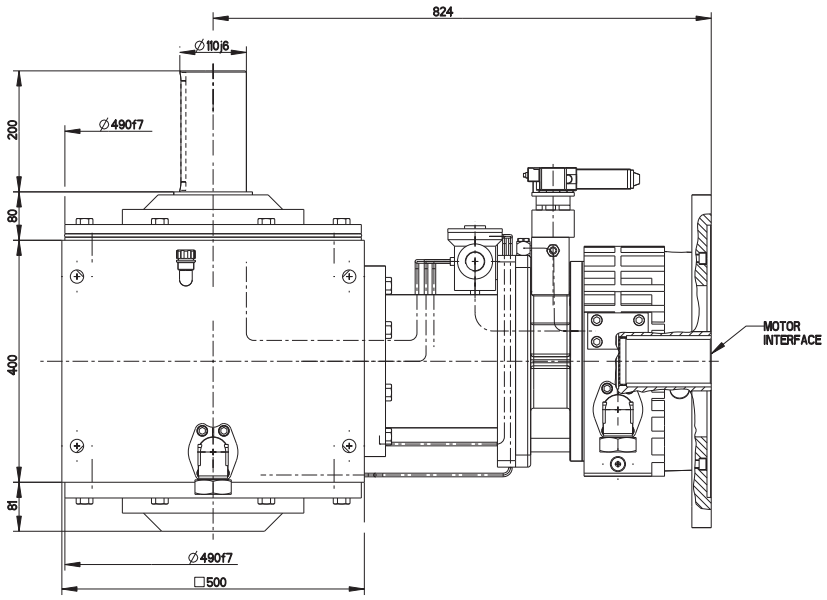
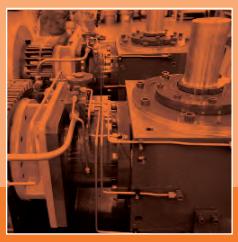
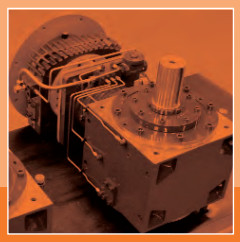
# MSR 650

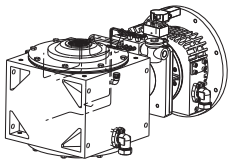


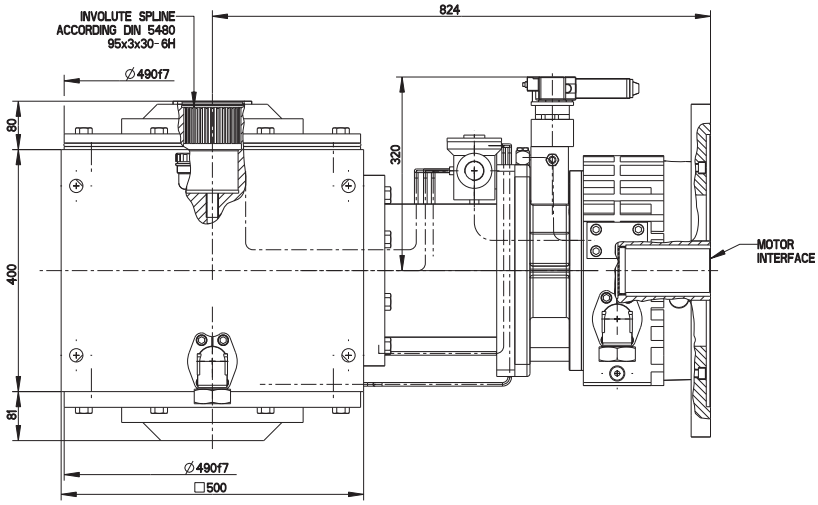



Dimensions and main data for information only, please refer to Product Datasheet

| | | | Plain Shaft | |
|---|---|---|---|---|
| **MODEL** | | | **MSR 654** | **MSR 656** |
| High speed ratio | i1 | - | 2.26 | 2.26 |
| Low speed ratio | i2 | - | 11.16 | 8.66 |
| Rated output torque | T2N | [Nm] | 6600 | 9000 |
| Max. input speed | N1B | [rpm] | 4500 | 4500 |
| Efficiency | η | [%] | 95 | 95 |
| Weight | m | [kg] | 750 | 750 |

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| | | | Hollow Shaft | |
|---|---|---|---|---|
| **MODEL** | | | **MSR 654** | **MSR 656** |
| High speed ratio | i1 | - | 2.26 | 2.26 |
| Low speed ratio | i2 | - | 11.16 | 8.66 |
| Rated output torque | T2N | [Nm] | 6600 | 9000 |
| Max. input speed | N1B | [rpm] | 4500 | 4500 |
| Efficiency | η | [%] | 95 | 95 |
| Weight | m | [kg] | 740 | 740 |

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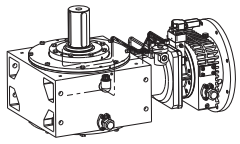
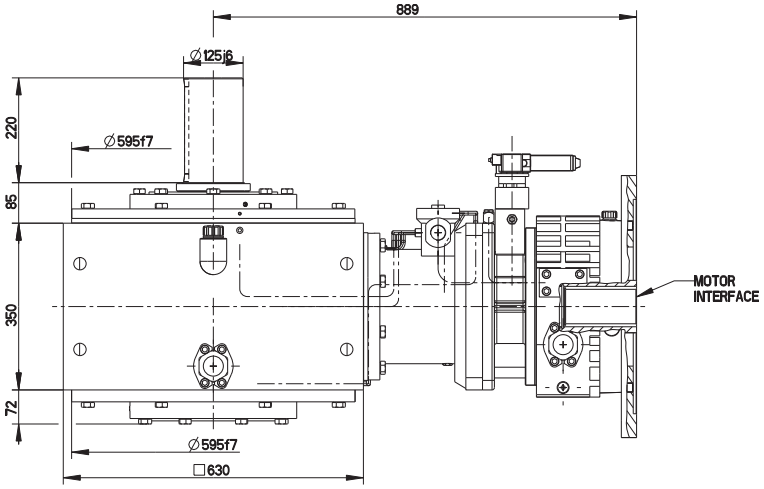
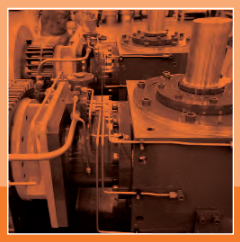
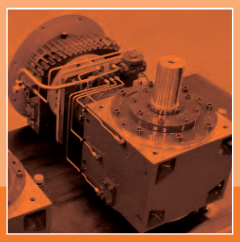
# MSR 660






Dimensions and main data for information only, please refer to Product Datasheet

| | | | Plain Shaft |
|---|---|---|---|
| **MODEL** | | | **MSR 666** |
| High speed ratio | i1 | - | 3.00 |
| Low speed ratio | i2 | - | 11.49 |
| Rated output torque | T2N | [Nm] | 12000 |
| Max. input speed | N1B | [rpm] | 3500 |
| Efficiency | η | [%] | 95 |
| Weight | m | [kg] | 1400 |


# REDEX

REDEX is the market leader in one of the critical function of machine-tools: linear , rotation and spindle drives.

REDEX was created in 1949 from a patented process based on the thermoplastic clamping of central parts of a planetary gearbox system able to dramatically increase the torque/volume ratio. The famous "REDEX pulley" therefore became the companion of three generations of engineers ...

Sixty years later REDEX made this taste for innovation the mainspring of its international development as a key partner of leading machine manufacturers around the world.

REDEX success relies on :

› Bringing innovative design solution with a significant commitment to R&D.

› Achieving top product quality through world class manufacturing, assembly and testing facilities.

› Offering local service, support and training through a unique network of highly trained application engineers worldwide and 3 service centers in Europe, Asia and America.

REDEX dedication to the machine-tool market is the key of its success, a company passionate for machine building, creating solutions for your success.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ANDANTEX USA Inc.

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