

# Type RDS Tool Application: Cylinders, inner surfaces

Diameters 38 – 60 mm

The RDS tool equipped with the RETRAC® system is designed to machine short cylinders up to 6 m long (depending upon the cylinder's diameter and the stiffness of the boring bar). The work cycle is extremely short because skiving and burnishing take place in one pass.

RDS tools feature the following advantages:

- Floating skiving knife with two reversible, high performance cutting inserts
- Knife adjusts easily by replacing the wedges
- Automatic coupling and separation with hydraulic RETRAC® cylinder incorporated in the boring bar
- Manual roller head diameter adjustment
- Patented choke disc concentrates the coolant-lubricant in the chip chambers
- Hydraulic RETRAC® device retracts knife and roller head when the process is finished, preventing damage to the finished workpiece

## Design versions

**NOTE:** To order combined skive-burnishing tools, please consult the table on page 51.

- 1. RDS:** standard skive-burnishing tool for diameters 38 – 60 mm
- 2. RDSS:** offers increased cutting performance with two skiving knives arranged at a 90° offset
- 3. RDSQ:** equipped with extended knives and support pads for skiving cylinders with cross holes
- 4. RDSE:** high performance tool with flexible roller head
  - Roller head diameter self-adjusts to compensate for variable cylinder elasticity and diameter tolerances
  - Maintains constant burnishing force for even surface quality
  - Burnishing force adjusted hydraulically with RETRAC® system
  - Adapts easily and with reproducible results to a variety of material strengths and surface condition requirements
  - Unique flex-joint compensates for possible boring bar misalignment