### **BRAUN Innovations for Steel**

Cutting-edge technologies for high-performance cutting



One machine – two applications: Combined abrasive cut-off / cold circular sawing machines



# One machine two applications

Combined abrasive cut-off / cold circular sawing machine



BRAUN's team of engineers has accepted this challange and combined two complete different cutting principles in one unique machine in order to take the advantages of both cutting technologies.

With a minimum change-over time, it is possible to change from abrasive cutting to cold circular sawing and vice versa.

BRAUN's tailor-made solution features an unbeatable flexibility, highest throughput and perfect cutting quality. Responding to the request of many customers of having the possibility to cut their complete range of materials with one machine with highest flexibility, BRAUN has combined two completely different cutting technologies in one facility.

More difficult steel grades can be cut with abrasive cut-off wheels, whereas for standard steel grades carbidetipped circular saw blades are used.



#### Available machine sizes

Machine type	Material size	Cut-off wheel dia. / sawblade dia.
TSKS 12/10 L	300 mm rd., 280 mm sq.	1270mm / 1000mm
TSKS 16/12 L	420 mm rd., 400 mm sq.	1600mm / 1250mm



## One machine two applications

### > Advantages of abrasive cutting



- Fast and flexible cutting process
- Suitable for all material grades (incl. Ti and Ni alloys)
- Suitable for all material temperatures (cold, warm, hot)
- Constant cutting quality due to self-sharpening of cutting tool (no re-sharpening required)
- Dry process (no liquid coolant)



#### > Advantages of cold circular sawing



- Reduced cutting costs for carbon and low-alloy steel grades
- Good recycling of chips
- Reduced cutting gap (waste of material)
- Minimum-quantity spray lubrication for extended service life of saw blade



### > Additional machine features

- Sturdy, vibration-damping machine base frame made of composite material
- Specifically designed, heavy-duty gearbox with two drive systems (one with high speed for abrasive cutting, one backlash-free and low-speed for circular sawing
- Cutting wheel / saw blade perfectly enclosed by "spark box" of special design (easy to clean, no swarf agglomerations from abrasive cutting process, etc.)
- Special tool clamping system for an easy and quick cutting wheel change
- Unique machine design to change-over between abrasive cutting and circular sawing rapidly
- · Reduced investment costs due to unique technology
- Reduced space requirement thanks to multi-purpose machine



### BRAUN Innovations for Steal

Global presence and customer support for the steel and special metals industries

BRAUN's world-wide expert network for cutting and grinding:

- 3 locations BRAUN Austria, BRAUN China, BRAUN USA
- > 26 authorized sales and service partners for 45 countries on all 5 continents



BRAUN Maschinenfabrik GmbH - Austria BRAUN Machine Technologies (Beijing) Co., Ltd. - PR China BRAUN Machine Technologies, LLC - USA

office@braun-steel.com www.braun-steel.com

