



## ***CUTTING AND GOUGING***

The cutting, gouging and piercing by means of shielded metal arc welding principles is a flexible and economic method of removing metal. The process does not require any compressed air, gas or any type of special electrode holder as standard equipment can be used.

The coating on cutting and gouging electrodes develops a strong gas jet, which blows away the molten material. These electrodes are excellent for preparation prior to repair of cast iron. The jet drives out and burns away impurities and/or graphite on the surface and thus reduces the risk of cracking and porosity when welding later. Gouging of manganese steel can also be suitably done.

For gouging normally AC or DC- should be used, whereas for cutting and piercing DC+ is recommended. The arc is struck holding the electrode at 90° to the workpiece. Once the arc is ignited, the electrode has to be pointed in the appropriate direction at 5-10° to the job surface and pushed in the forward direction. A to-and-fro motion has to be maintained to carry on with the cutting or gouging action. For piercing, the arc has to be struck in a vertical position and the electrode pushed down to penetrate through the material. The electrode is manipulated with a sawing motion to enlarge the bore.



## TERROCUT

### Precision cutting electrode

Specially designed electrode producing a highly forceful and concentrated arc, which can be efficiently used for cutting and piercing holes in carbon steels, cast irons and manganese steels.

Terrocut does not heat up the material excessively due to ionizing additives in coating design. This results in lower heat affected zone.

### SPECIAL FEATURES

- High cellulose roaring arc.
- Low heat affected zone.

### APPLICATIONS

Cutting of mild steels, low carbon steels, manganese steels, cast iron, copper, manganese, aluminium, nickel and their alloys, casting risers, gates, dressing for filling up, etc. Absolutely suitable for burning rivets, dismantling work at site and for cutting out unwanted metal in castings.

### CURRENT RANGE : (AC 70, DC±)

Size (mm)	Length (mm)	Current Range (Amp)
3.15	300	160-250
4.00	350	220-300
5.00	350	260-350

## OK 21.03

### Single electrode for gouging, precision cutting and chamfering

OK 21.03 has a specially developed coating which produces a strong gas jet that blows away the molten material so that the electrode is absolutely suitable for gouging, cutting, chamfering, piercing, drilling holes. It can be used in all positions except in vertical up. Grooves are even and smooth and subsequent welding can follow without further preparation since the volume of slag is almost nil.

With this electrode, the cutting and gouging activity can be taken up without the necessity of any gas or special electrode holder.

### SPECIAL FEATURES

- Roaring arc force.
- Thinner coating than other gouging electrodes - better positional properties.
- Excellent performance even under water.
- Sharp and clean kerfs.

### APPLICATIONS

Cutting, chamfering, gouging, and piercing of steel, cast iron, copper and its alloys, aluminium and its alloys, manganese, stainless steel, zinc, nickel and its alloys. Used for beveling, for joint preparation, gouging of cracks and back gouging of root runs especially when welding of steel structures, storage tanks, etc. and for removal of unnecessary metal in castings.

### PROCEDURE

- Strike arc perpendicular to work piece.
- Tilt the electrode at 10-15° and push forward.
- Move the electrode sequentially up and down to melt and remove metal.

### CURRENT RANGE : (AC 70, DC±)

Size (mm)	Length (mm)	Current Range (Amp)
3.15	350	160-180
4.00	350	220-270
5.00	350	240-320