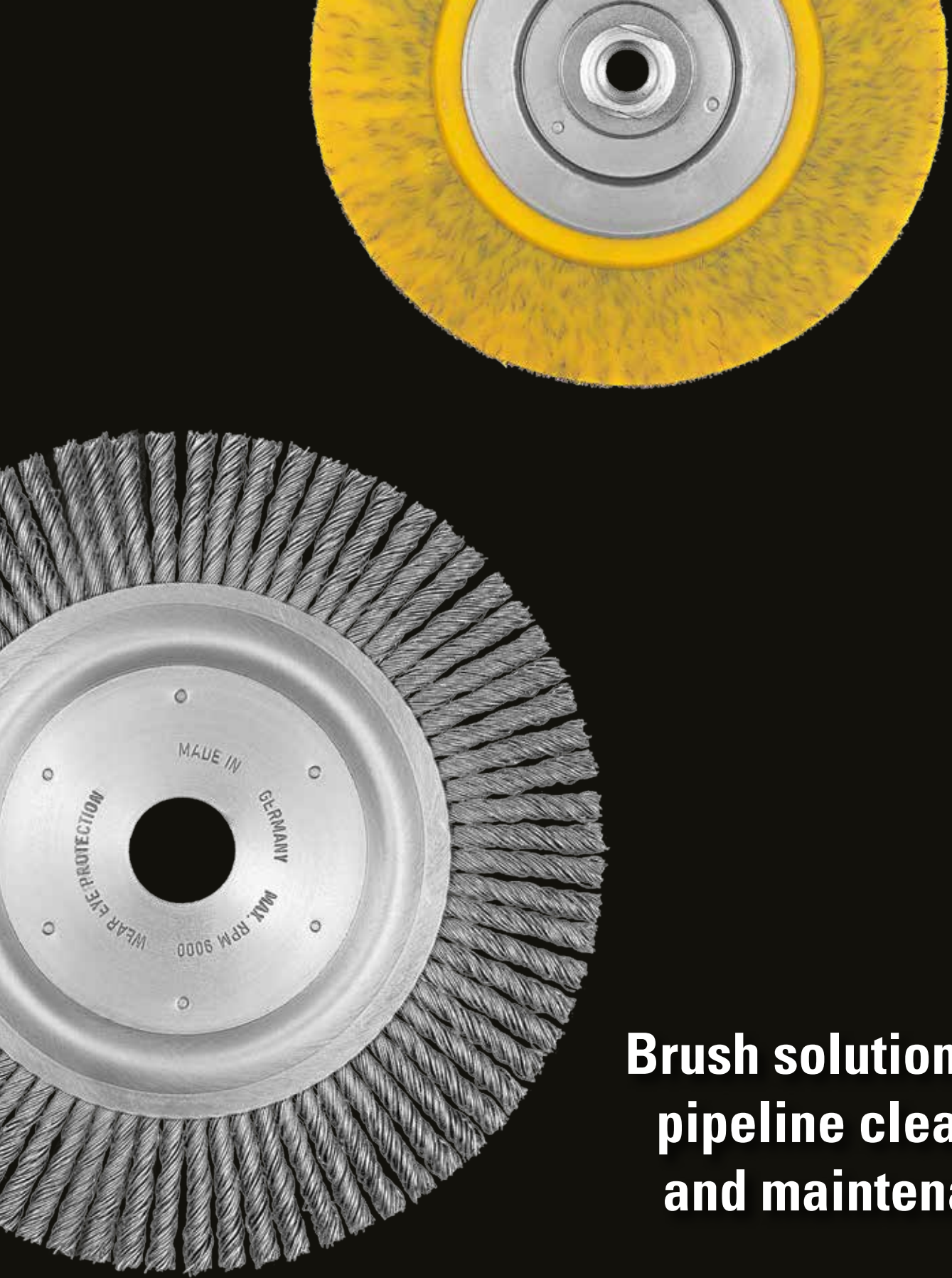


KULLEN - KOTI BRUSHES

**Brush solutions for
pipeline cleaning
and maintenance**



BRUSH SOLUTIONS FOR PIPELINE CLEANING AND MAINTENANCE



In the pipeline industry there are many brush solutions from cleaning the interior and exterior of pipelines to weld cleaning and edge cleaning.

The effective cleaning of pipelines and pipeline equipment ensure reduction of the formation of dirt build-up thus improving the flow, reducing erosion wear, preventing clogging, improving the durability of equipment. Besides cleaning pipelines with KULLEN - KOTI brushes, welds of pipelines are treated and smoothed as neat and tight as possible preventing holes and thus leaks.

Whether cleaning pipeline inspection gauges (PIG's), deburring edges, descaling or smoothing pipelines, KULLEN - KOTI brushes are designed and manufactured specifically for your application to provide the perfect brush solution. From large welds to the smallest cracks our brushes smooth and descale every aspect of pipeline equipment.

Additionally, our extensive range of wire and abrasive engineered brushes can form an invaluable part of any installation and maintenance toolkit.

As part of the KOTI Group, we specialize in working closely with you to deliver value, service and performance that won't let you down.



CHOOSING THE RIGHT BRUSH HAS NEVER BEEN SIMPLER

With decades of experience in the development and manufacture of brush products, KULLEN – KOTI has become one of the leading providers of industrial and technical brush solutions:

- "Pig" brushes
- Abrasive brushes
- Steelwork and pipeline fabrication brushes
- Steel wire brushes
- Work tool brushes
 - Weld cleaning brushes
 - Tube cleaning brushes
 - End brushes
 - Cup brushes
 - Hand brushes

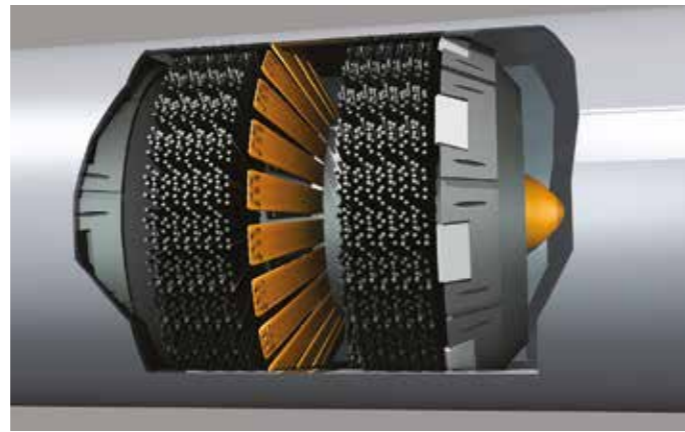
Customer support is key to our business approach and we aim to match the reliability of service with that of our products. With dedicated manufacturing and customer support from our local representation, we are able to give you full technical assistance in all aspects of brush technology either by phone or a plant visit by one of our technical field representatives.

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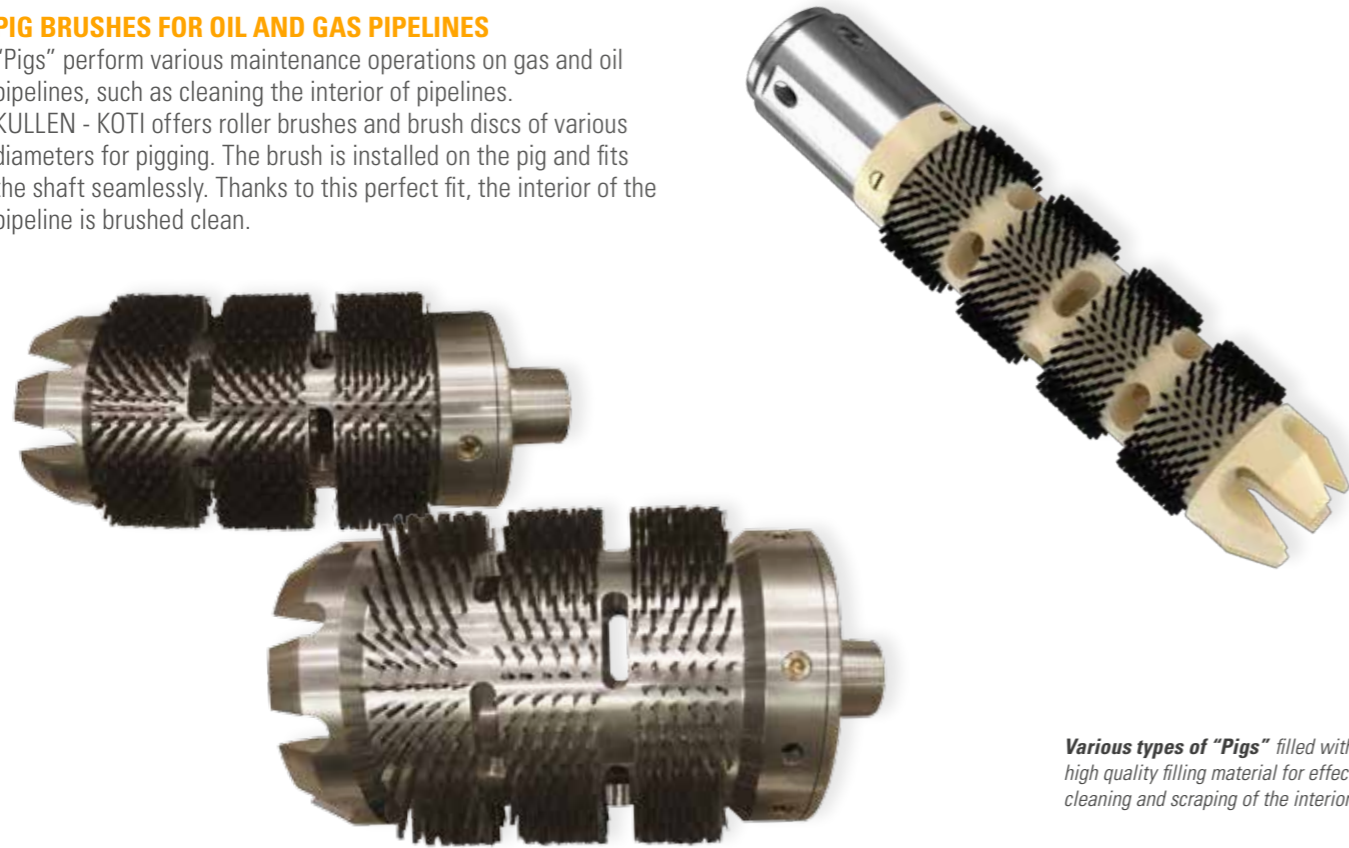
www.kullen.com / www.koti-eu.com



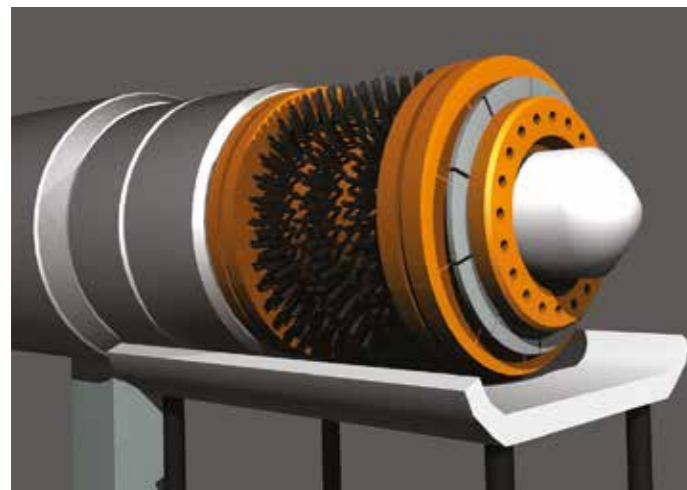


PIG BRUSHES FOR OIL AND GAS PIPELINES

"Pigs" perform various maintenance operations on gas and oil pipelines, such as cleaning the interior of pipelines. KULLEN - KOTI offers roller brushes and brush discs of various diameters for pigging. The brush is installed on the pig and fits the shaft seamlessly. Thanks to this perfect fit, the interior of the pipeline is brushed clean.



Various types of "Pigs" filled with high quality filling material for effective cleaning and scraping of the interior



GAS PIPELINE BRUSHES

In gas pipelines a solid contaminant can be formed by the transportation of natural gas and other types of gas. This contaminant is named Black Powder and can cause a range of problems, including product contamination, equipment contamination, erosion wear in compressors, instrument and filter clogging, erosion and sealing problems for valves and flow reduction.

Cleaning newly installed pipelines with KULLEN - KOTI brushes will delay the formation of black powder in gas pipelines.

CLEANING OF LARGE PIPES

Brushes are the best choice to clean the pipeline to maintain an optimal throughput. Debris, which can reduce the pipe nominal diameter and decrease the pipeline capacity, is removed by brushes. Due to the removal of the debris the pipeline has a longer life span and the throughput is more effective.

KULLEN - KOTI offers a wide range of brushes with big diameters and strong abrasion performance for cleaning of large pipes and tubes.



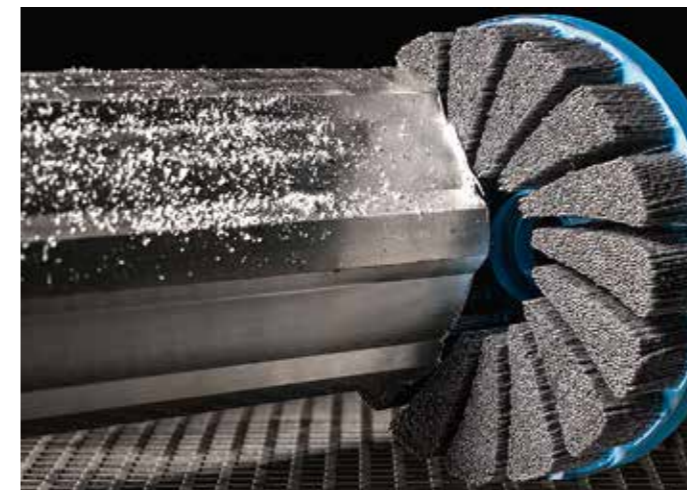
OFF-SHORE AND PETROCHEMICAL BRUSHES

In the offshore and petrochemical industries brushes are used for cleaning large tubes, similarly to pipelines. The brushes clean pipe joints with various curves. Also for drilling pipes brushes are used to prevent the build-up of algae and shellfish. Another application of our brushes in the sea is the removal of slick on the water surface. Due to our high-quality filling material the slick is caught and captured between the brush fibers thus cleaning the sea.



WELD CLEANING BRUSHES

Our weld cleaning brushes provide the ideal solution for cleaning all types of pipe welds and steel fabrication. Designed to provide fast slag removal from weld joints, these brushes are the perfect tool for root runs to prevent porosity, burn through, inclusions and lack of fusion. Whatever the grade and size of pipe or grinder, we can deliver quickly from our extensive stock range. For more information please consult the next pages.



OTHER BRUSH APPLICATIONS

As a manufacturer of technical brushes and work tool brushes, we also offer solutions for the following:

- Deburring of edges and surfaces
- Derusting
- Surface treatment
- Descaling
- Paint removal
- Polishing and smoothing
- Removing of dirt
- Burr removal from threads
- ... and many more!



PIPELINE BRUSHES ULTRA AND ULTRA LEAR



PIPELINE BRUSHES FOR ROOT AND HOT PASS/FILL LAYER WEAR EYE PROTECTION 

ULTRA - Ø 0,50 mm							
Ø	Z*	B	L	d	n-1	Type	Art.-Nr.
125 (5")	40	6	18	22,2	12500	PZK3121	99023074
125 (5")	40	6	18	M 14	12500	PZK3121	99023178
125 (5")	40	6	18	5/8"	12500	PZK3121	99023243
152 (6")	40	6	31	22,2	9000	PZK3151	99023095
152 (6")	40	6	31	M 14	9000	PZK3151	99023177
152 (6")	40	6	31	5/8"	9000	PZK3151	99023197
178 (7")	52	6	36	22,2	9000	PZK4181	99024111
178 (7")	52	6	36	M 14	9000	PZK4181	99024127
178 (7")	52	6	36	5/8"	9000	PZK4181	99024128
178 (7")	76	5	33	22,2	9000	PZK4181	99024113
178 (7")	76	5	33	M 14	9000	PZK4181	99024129
178 (7")	76	5	33	5/8"	9000	PZK4181	99024130

Z* = Number of knots per row.

PIPELINE BRUSHES FOR FILL/ CAP LAYER

Dimensions in mm WEAR EYE PROTECTION 

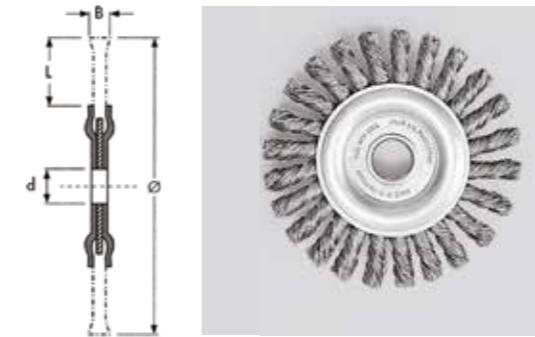
ULTRA - Ø 0,50 mm							
Ø	Z*	B	L	d	n-1	Type	Art.-Nr.
125 (5")	20	10	18	22,2	12500	PZ3121	99023326
125 (5")	20	10	18	M14	12500	PZ3121	99023327
125 (5")	20	10	18	5/8"	12500	PZ3121	99023328
152 (6")	24	10	31	22,2	9000	PZ3151	99023100
152 (6")	24	10	31	M14	9000	PZ3151	99023198
152 (6")	24	10	31	5/8"	9000	PZ3151	99023199
178 (7")	28	10	35	22,2	9000	PZ4181	99024112
178 (7")	28	10	35	M14	9000	PZ4181	99024133
178 (7")	28	10	35	5/8"	9000	PZ4181	99024131

Z* = Number of knots per row.

ULTRA brushes consist of single twisted steel wires, which are twisted to the end of the knot. A specially-developed twisting method prevents untwisting during operation. Pipeline brushes with a higher number of twists have a correspondingly more aggressive action.

FILLING MATERIAL: Hardened steel wire, hard and tough, straight.

APPLICATION: Suitable for handheld grinders and stationary machines.



ULTRA LEAR brushes with a special knot construction are very specialized in cleaning and deburring applications. The ULTRA LEAR brushes are alternately twisted - this knot construction is developed on the basis of existing knot styles. These brushes can offer superior balance during rotation.



PIPELINE BRUSHES ULTRA LEAR

Dimensions in mm

WEAR EYE PROTECTION 

ULTRA - Ø 0,50 mm							
Ø	Z*	B	L	d	n-1	Type	Art.-Nr.
125 (5")	24	12	28	22,2	12500	PZ2121	99023332
125 (5")	24	12	28	M14	12500	PZ2121	99023333
125 (5")	24	12	28	5/8"	12500	PZ2121	99023334
150 (6")	30	13	30	22,2	9000	PZ3151	99023329
150 (6")	30	13	30	M14	9000	PZ3151	99023330
150 (6")	30	13	30	5/8"	9000	PZ3151	99023331
180 (6")	30	13	36	22,2	9000	PZ4181	99023335
180 (6")	30	13	36	M14	9000	PZ4181	99023336
180 (6")	30	13	36	5/8"	9000	PZ4181	99023337

Z* = Number of knots per row.

PIPELINE BRUSHES DELTA



The wires of DELTA brushes are embedded in an elastic synthetic material and are thus extremely aggressive and long lasting. The brushes also offer increased working safety, since the synthetic embedding prevents wire breakage.

FILLING MATERIAL: LTE - Brass-plated steel wire, tempered single wire, crimped.

APPLICATION: Suitable for handheld grinders and stationary machines.



PIPELINE BRUSHES FOR ROOT AND HOT PASS

Dimensions in mm

WEAR EYE PROTECTION 

DELTA - LTE Ø 0,35 mm							
Ø	B	L	d	n-1	Type	Art.-Nr.	
152 (6")	5	21	22,2	9000	DK-B6151	99181161	
152 (6")	5	21	M14	9000	DK-B6151	99181162	
152 (6")	5	21	5/8"	9000	DK-B6151	99181163	
178 (7")	5	34	22,2	9000	DK-B6181	99180058	
178 (7")	5	34	M14	9000	DK-B6181	99181095	
178 (7")	5	34	5/8"	9000	DK-B6181	99181164	

OTHER BRUSHES

We also manufacture other work tool brushes, such as cup brushes and hand brushes for edge cleaning. For more information, please contact our sales team or look on our website www.kullen.com.

Unlimited possibilities



In many ways our brushes provide added value to your pipelines. Whether it's cleaning the weld passes or removing heavy build-up, KULLEN - KOTI brushes can enhance the durability, the appearance and functionality of all kinds of pipelines and related fields:

- Oil pipelines
- Gas pipelines
- Concrete pipelines
- Off-shore pipelines
- Water pipelines
- Plastic pipework

... and many more!



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