



Maats IB – Internal Bending Machine

Entry for the IPLOCA New Technologies Award
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How insulated bends are made



Factory made bends

- Time- and labour intensive, therefore very expensive
- Inconsistent insulation / insulation values
- Transport very expensive

Conventional bending

- Lower insulation value because of high density foam
- Pipe much more expensive
- Damage cannot be avoided



How insulated bends can be made



Internal bending

Normal density foam (50-75 kg/m³)

- + Optimum insulation value
- + Pipe standard, therefore cheaper
- + Controlled bending, no damage
- + Bending cheaper than factory made bends
- + Bending anywhere

Capacity

- ❖ DN450-DN800 (18" to 32")
- ❖ Up to API-5L-X65*
- ❖ Up to 21,2 mm wall thickness*
- ❖ Spirally and longitudinally weld
- ❖ 1° bend per meter (bendable part)*

* Depending on diameter and material

Main advantages Maats IB



Saving money on logistics and reducing CO2:

- 1 truck with 9 standard straight joints from factory to job site vs. 3 trucks with large bends (as an example)

Flexibility:

- Delivery time per bend is 2 hours vs. several weeks for a factory made bend
- Easy adjustment to unexpected obstacles or change in routing

Quality:

- Consistent quality because of the use of standard joints
- Less faults because of largely automated bending process

