



Performance Casing Guide Shoes

WWT's Performance Casing Guide Shoes are operator-focused solutions to address a variety of casing running challenges.

FlexShoe

Flexible but robust casing guide shoe ideal for running past severe dog-legs, ledges, soft formation, and when running stiff casing. Can be run with any guide shoe listed below.

JetGuide

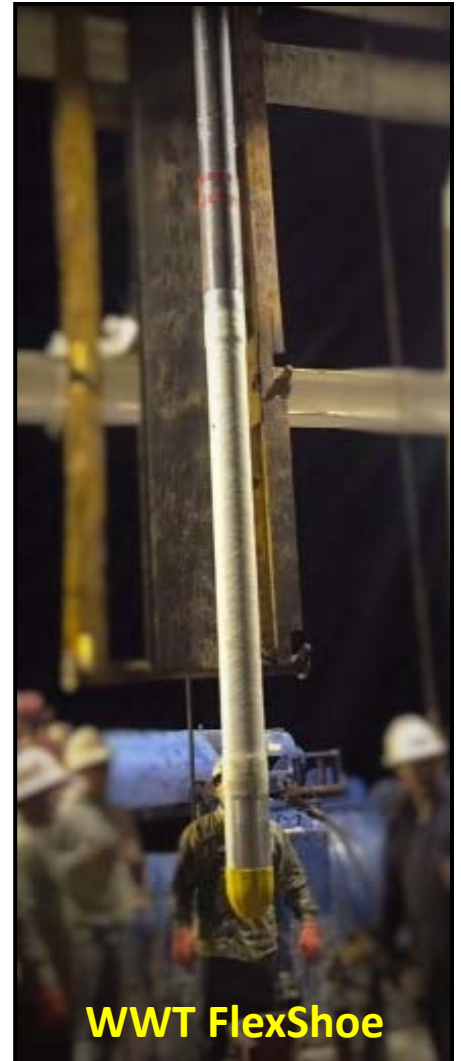
High velocity fail-safe jetting shoe that can help wash through cuttings, moderate cave-ins, and through salt or tar.

ReamGuide

Drillable reamer with jetting feature that can help when rotating through tight spots.

ToughGuide

Durable, drillable, general purpose guide shoe for use in all wells. Available in durable, impact resistant poly, or harder drillable cement composite.



WWT FlexShoe



WWT ReamGuide



WWT JetGuide

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WWT JetGuide

High Velocity Failsafe Jetting Shoe



Specifications

Model	JGS-450	JGS-550	JGS-700	JGS-758	JGS-958	JGS-1075	JGS-1175	JGS-1338	JGS-1400	JGS-1600	JGS-1800
Casing Size (inches)	4-1/2	5-1/2	7	7-5/8	9-5/8	10-3/4	11-3/4	13-3/8	14	16	18
Max OD (inches)	5-3/8	6-1/4	8-1/4	8-3/4	11-1/8	11-3/4	12-3/4	14-1/4	14-1/4	16-1/4	18-1/8
Minimum TFA* (in ²)	2.1	2.1	5.1	5.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1

*TFA after conversion to large bore flow.

Features and Benefits

- **Effective**
 - Ring of high velocity fluid jets cuttings out of the way
 - Large center bore allows unrestricted auto-fill
- **Safe**
 - Jets at 75% flow rate, and converts to full-open center bore at 100% flow rate for cementing or pumping LCM
 - Automatically converts to full-open center bore if jets are plugged
- **Drillable**
 - Easily drilled out.
 - Plastic and cement composite material used throughout. Almost no metal in drill out path.
- **Modular.**
 - Cost effective for use on any well
 - Increases the effectiveness of the WWT FlexShoe, or can be used as stand-alone product
 - Float installed above shoe



WWT International
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WWT ReamGuide

Drillable Reamer & Jetting Shoe



Specifications

Model	RGS-450	RGS-550	RGS-700	RGS-758	RGS-858	RGS-958	RGS-1075	RGS-1175
Casing Size (inches)	4-1/2	5-1/2	7	7-5/8	8-5/8	9-5/8	10-3/4	11-3/4
Reamer OD (inches)	5-3/8	6-1/4	8-1/4	8-3/4	9-3/4	11-1/8	11-3/4	12-1/4
Minimum TFA (in ²)	2.1	2.1	5.1	5.1	7.1	7.1	7.1	7.1

*TFA in. With optional jetting feature TFA out is reduced until opening centerline at predetermined flow rate.

Features and Benefits

- Low cost
 - Lowest cost reamer shoe available
- Durable
 - Rotate casing to ream down through trouble zones or past obstructions
 - Tough polyurethane or cement composite body with aluminum frame holding cutters.
- Effective
 - Cutting elements provide effective reaming and movement of cuttings
 - Available with straight and helical blades.
- Drillable
 - Made from aluminum and polyurethane or cement composite
 - Minimal aluminum content in drill-out path.
- Modular.
 - Works well with the WWT FlexShoe.
 - Can be used as a stand-alone product.
 - Also available with WWT Jetting Shoe insert.
 - Float installed separately above shoe



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WWT ToughGuide

Cost-Effective Premium Guide Shoe



Specifications

Model	TGS-450	TGS-550	TGS-700	TGS-758	TGS-958	TGS-1075	TGS-1175	TGS-1338	TGS-1400	TGS-1600	TGS-1800
Casing Size (inches)	4-1/2	5-1/2	7	7-5/8	9-5/8	10-3/4	11-3/4	13-3/8	14	16	18
Max OD (inches)	5-3/8	6-1/4	8-1/4	8-3/4	11-1/8	11-3/4	12-3/4	14-1/4	14-1/4	16-1/4	18-1/8
Minimum TFA* (in ²)	2.1	2.1	5.1	5.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1

*TFA and nozzles can be configured to meet customer requirements.

Features and Benefits

- Rounded cone shape helps guide casing downhole.
- Shoe able to take significant load without damage, but is still very easy to drill out.
- Polyurethane is impact resistant and can deform without breaking.
- Cement composite can handle high temperatures and high set down weights.
- Nozzle and flow area able to be configured in almost any way.
- Easily drilled out, no metal in drill out path.
- Interior/exterior geometry means cement and shoe are coupled for easy drill out without spinning.
- Cost effective for use on any well
- Can be used with WWT FlexShoe, or alone.
- Float installed above shoe.



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