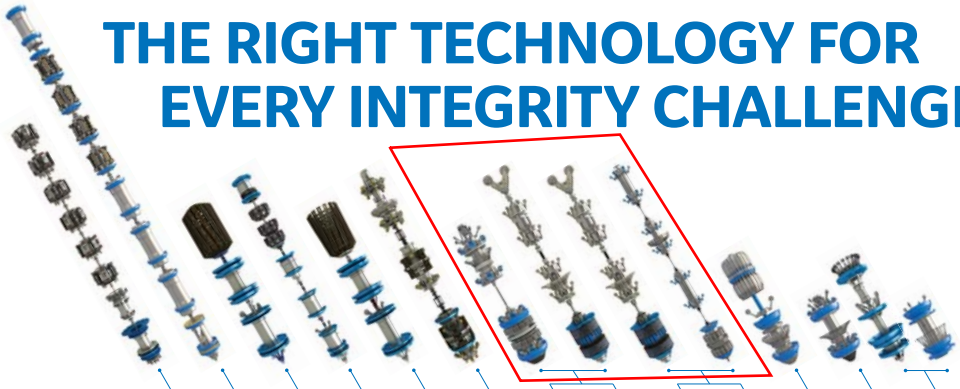
Wilson Walton Indonesia

BAKER HUGHES a GE company

THE RIGHT TECHNOLOGY FOR EVERY INTEGRITY CHALLENGE



- Optimum specification
- Good specification
- Available
- Consult BHGE

Tools not to scale

INTEGRITY ASSESSMENT

- **EmatScan™ CD** — Superior accuracy POD and POI
- **UltraScan™ CD EDGE** — Higher resolution, superior accuracy to optimize dig programs
- **UltraScan™ CDP** — Higher resolution, high accuracy crack inspection
- **UltraScan™ Duo** — Most sophisticated anomaly imaging for cracks and metal loss
- **UltraScan™ WMP** — Higher resolution, higher accuracy direct wall measurement
- **TransScan™ TFI** — Detect axial flaws with confidence
- **New MagneScan™ SHRP & VECTRA GEMINI HD** — Superior accuracy to optimize dig programs
- **New MagneScan™ SHR & VECTRA GEMINI** — High accuracy triaxial MFL with caliper
- **New MagneScan™ HR** — Next generation high resolution combination MFL
- **MagneScan™ HR** — High resolution MFL inspection
- **CPIG** — High resolution MFL inspection of complex or unpiggable geometries
- **GEOPIG™** — High resolution deformation and strain assessment
- **PROFILE™ & CalScan™ EP** — Line proving and validating construction
- **ThreatScan™** — Detect pipeline impacts or third party interference
- **Pipeline strain assessment (IMU Strain)**
- **Mechanical damage assessment (PIDA)**
- **Corrosion growth assessment (Runcorn™)**
- **Crack assessment (PICA)**
- **Pipeline risk assessment**
- **Fitness-for-service assessment**

		EmatScan™ CD	UltraScan™ CD EDGE	UltraScan™ CDP	UltraScan™ Duo	UltraScan™ WMP	TransScan™ TFI	New MagneScan™ SHRP & VECTRA GEMINI HD	New MagneScan™ SHR & VECTRA GEMINI	New MagneScan™ HR	MagneScan™ HR	CPIG	GEOPIG™	PROFILE™ & CalScan™ EP	ThreatScan™	Pipeline strain assessment (IMU Strain)	Mechanical damage assessment (PIDA)	Corrosion growth assessment (Runcorn™)	Crack assessment (PICA)	Pipeline risk assessment	Fitness-for-service assessment
OPERATIONAL	Gas medium	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●				
	Liquid medium	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●				
	Multi/dual-diameter	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●				
	Thick wall pipe	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●				
	High-flow velocity	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●				
	Short traps		●			●	●	●	●	●	●	●	●	●	●	●	●				
	Unknown cleanliness	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●				
	CRA clad pipe	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●				
	Baseline inspection	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●
CORROSION & METAL LOSS	External				●	●	●	●	●	●	●	●	●	●					●	●	●
	Internal				●	●	●	●	●	●	●	●	●	●					●	●	●
	Pinholes					●		●	●	●	●	●	●	●					●	●	●
	Complex corrosion				●	●	●	●	●	●	●	●	●	●					●	●	●
	Highly corroded				●	●	●	●	●	●	●	●	●	●					●	●	●
	Narrow axially oriented				●	●	●	●	●	●	●	●	●	●					●	●	●
	Circumferentially oriented				●	●	●	●	●	●	●	●	●	●					●	●	●
	Wall thinning/erosion				●	●													●	●	●
CRACKING	Axial cracks	●	●	●	●		●													●	●
	Hydrogen induced cracks	●	●	●	●		●													●	●
	Hook/seam weld anomalies	●	●	●	●		●													●	●
	Seam weld lack of fusion	●	●	●	●		●													●	●
	Fatigue cracks	●	●	●	●		●													●	●
	Shrinkage cracks	●	●	●	●		●													●	
	Circumferential cracks		●	●				●	●	●	●								●	●	
	Stress Corrosion Cracking (SCC)	●	●	●	●															●	●
MANUFACTURING & CONSTRUCTION	Girth weld anomalies							●	●	●	●	●							●	●	
	Spiral weld anomalies						●	●	●	●	●	●							●	●	
	Seam weld anomalies	●	●	●	●		●													●	
	Laminations & midwall defects				●	●		●	●	●	●									●	
	ID expansions/Roof topping					●		●	●	●	●	●	●	●							
	Wrinkle bends	●	●	●		●	●	●	●	●	●	●	●	●	●	●			●	●	●
	Centerline mapping						●	●	●	●	●	●	●	●					●		
	Bend characterization	●	●	●	●	●	●	●	●	●	●	●	●	●	●				●		
THIRD PARTY DAMAGE & GEOMETRY	Plain dents	●	●	●	●	●	●	●	●	●	●	●	●	●	●						●
	Dents on welds	●	●	●	●	●	●	●	●	●	●	●	●	●	●						●
	Complex geometry dents	●	●	●	●	●	●	●	●	●	●	●	●	●	●						●
	Dent strain and fatigue assessment (PIDA)						●	●	●	●	●	●	●	●	●						●
	Ovality							●	●	●	●	●	●	●	●						●
	Gouging				●	●	●	●	●	●	●	●	●	●							●
	Hard scale				●	●	●	●	●	●	●	●	●	●	●						
	Real time third party strikes															●				●	●
	Illegal tapping & pilferage					●	●	●	●	●	●	●	●	●						●	
GEOHAZARD	Buckle/wrinkle					●	●	●	●	●	●	●	●	●	●				●		●
	Bending strain						●	●	●	●	●	●	●	●	●					●	
	Axial strain with AXISS™							●	●										●		
	Pipeline movement							●	●	●	●	●	●	●	●					●	
MULTIPLE THREATS	Cracks in metal loss	●	●	●	●																●
	Cracks in dents	●			●		●	●	●	●	●	●	●	●							●
	Metal loss on dents				●	●	●	●	●	●	●	●	●	●							●
	Defects interacting with strain							●	●	●	●	●	●	●					●	●	●