STAN ONE ®

CRP300
ROBOTIC CRAWLER CAMERA
PIPE INSPECTION SYSTEM

In association with

minicam

minicam

STAN ONE ®

Minicam, UK has been producing pipeline inspection systems for 30 years. Minicam is a part of Halma PLC group, a conglomerate with over £1.5B in revenues & one of Great Britains most admired companies.

asian contec limited, under an exclusive arrangement, provides supply, training & after sales of Minicam robotic tractor crawlers & push cameras including ATEX pipe inspection systems for the Indian market under its brand name STANONE. asian contec limited, is india's largest supplier of buried utility locating, marking and inspection systems.

The following pages feature a myriad of configuration options of the CRP300 robotic crawler for inspection of sewer, waste water and water pipes, for condition assessment of pipes, to establish sections of pipe which require pipe rehabilitation or relining, verification of quality of newly laid pipes, visual inspection of locations otherwise hazardous for humans, flooding defects with potential for significant savings of both CAPEX & OPEX for Utilities & Industry, efficient project planning and estimation.

Crawler Camera System is available in 2 Configuration

Van Mounted Robotic Crawler System
Van mounted system are typically fitted with Heavy Duty Fully Automatic or Semi-Automatic cable reel systems & Van mounted control unit with large screen display.

Portable Robotic Crawler System
Trolley securely holds the control unit, manual cable reel & camera powered by a high performance battery system.

The following pages provide a variety of configuration options for robotic crawlers including cameras & cable reels.
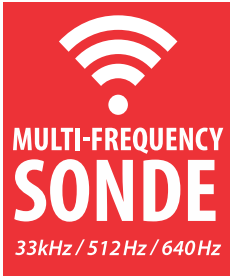
Standard Tractor Crawler Features

Motorised Camera

Solely for adjusting the height of a camera (centralising) inside a pipeline to have a clearer view of top to bottom.

Locate Pipe Location

MULTI-FREQUENCY SONDE

33 kHz / 512 Hz / 640 Hz

*When used with industry standard pipe cable locator.
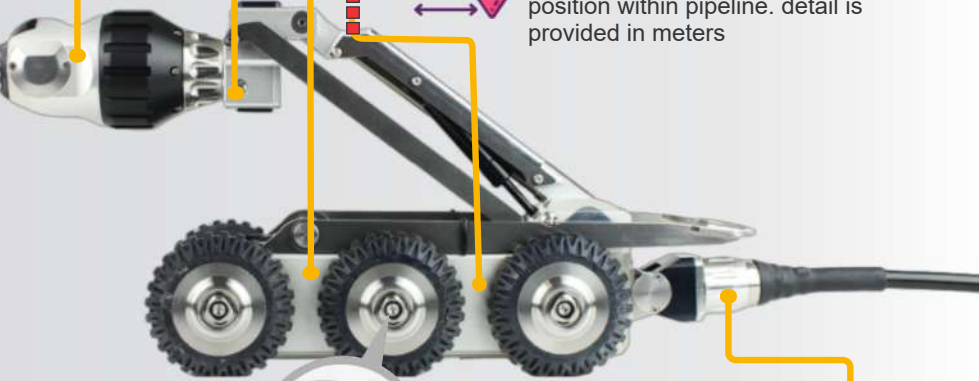
CAM028L PAN, ROTATE, ZOOM & LASER CAMERA

Horizontal & vertical movement is smooth and shudder-free, with the full 360°rotation & +/-135° pan.
Two aligned lasers for defect & object measurement and a distance sensor for pipe diameter measurement. Twin clusters of three powerful, ultra-bright LEDs for optimum illumination.

Interchangeability Of Camera

Cameras are interchangeable in field without need of tools. Heavy duty connector prevents ingress to the connections.

In-Built Sensors

Temperature sensor measures the temperature of the pipeline, which can be helpful in identifying areas of potential damage or leaks.

Inclination sensor that detects changes in the pitch and roll of the crawler, a graph is generated with the information gathered.

Meterage feature shows the distance traveled by crawler on control unit that helps operator to keep track of its position within pipeline. detail is provided in meters

Quick Change Wheel Lock

Wheels of the Tractor Crawler System can be changed to larger or smaller wheels and wheels of different material types, to allow the robotic crawler operate in a variety of pipe diameters, conditions and pipe materials. Using the supplied, 4mm T-Bar the operation is quick and simple, with no other tools required. It is recommended to opt for various wheel sizes at the time of purchase to expand system capability.

Our Wheels offer significant performance & additional height benefits in various pipe diameters and for specific operating conditions.

Articulated 'knuckle' Connector

Enables easy deployment of the tractor and prevents water ingression to the connections.

Proteus Crawler CRP300 & Its Expandability

STAN ONE ®

CRP300

Designed for Larger pipe diameters with high flow rates, this heavy duty crawler makes easy work of inspections in more difficult environments.
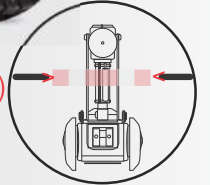
Standard :
- Motorised camera elevator range 135~400mm.
- 6x QRWX140SR 140mm Rubber Wheels
- Options include Wide axle Balloon Wheels
- Integrated Cruise control & proportional control in slippery conditions
- Bigger wheel options available
- Multi-frequency SONDE

Optional :
- Wide axle balloon wheels
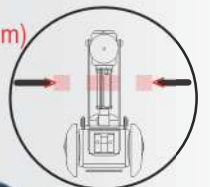
39"
(1000 mm)

Technical specifications	
Dimension HxWxL	205 x 235 x 575mm
Weight (w/o cable)	32Kgs
Weight with CEP300 camera elevation attachment (w/o cable)	37.7Kgs

Use in pipelines of 11" (300mm) to 39" (1000mm).

Extendable to 86"(2200mm) pipes using CEP300 Crawler Cradle.

86"
(2200 mm)

Accessories

Tractor Camera Extender
Extends the camera position 4" (100mm) forward

The Tractor Camera Extender moves the camera position 4" (100mm) forwards, extending the camera beyond the Tractor.

When the camera is positioned 90° downwards, this provides a view of the invert of pipeline, and not the Tractor.

100mm

Technical specifications	
Product code	CCE01
Dimension	114 x 48 x 48mm
Weight	302g
Camera extends	100mm forward

LED Pods
APB300 / APN300 adjustable LED light pods for larger pipe diameters

Twin LED light pods has a directional light function that provides a full horizontal 180° rotation and a 90° upward rotation control, enabling forward, upward, rear or sideways facing positions.
The light pod accessory fits all Proteus Tractors, and is quick and easy to fit.

Back view   **Front view**

**LED Pods are available in 2 variants :
With back camera & without back camera.**

LED Pods	APB300	APN300
Pipe diameter	12"	12"
Illumination system	9 High power LEDs	9 High power LEDs
Backeye camera	Yes	No
Pressure depth rating	1 BAR (14.50psi)	1 BAR (14.50psi)
Dimensions	83 x 152 x 5mm	50 x 152 x 53mm
Weight	480g	400g
ATEX Zone 1 certified	Optional	Optional

Accessories

Camera Elevation Platform
Increase the inspection capability of your CRP300

The telescopic elevator is quick to attach to the CRP300 tractor and can be manually moved up or down to increase crawler inspection capabilities up to 86" (2200mm)

Interface provides easy connection for various combinations of camera, auxiliary lights and pods.

note : accessory exclusively for CRP300

Technical specifications	
Product code	CEP300
Connections	Camera connection, lifter connection, 2x additional lamp connections, 1x additional lamp connector with backeye camera.
Dimension	139 x 127 x 475mm
Weight	5.7Kgs

Extra Weight Plate
Extra down-force & traction for the crawler

Exclusively compatible with Proteus CPL150S and CRP140 Tractors, the 2.5kg Extra Weight Plate gives the Tractor extra down-force to allow for more traction in tricky pipe conditions. Quick to attach,

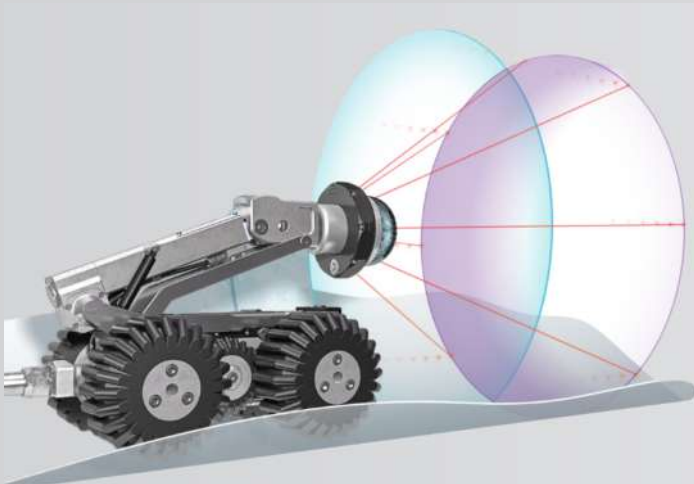**The assembly is supplied with fixing bolts and washers.**

Technical specifications	
Product code	EWP01
Compatibility	CPL150s / CRP140
Dimension	254 x 76 x 12mm
Weight	2.5kg
Supplied with	Fixing bolts & washers

Precision Cameras

For Optical Excellence

AXIAL	PAN & ROTATE	PAN, ROTATE & LASER	PAN,ROTATE,ZOOM & LASER
CAM027	CAM026	CAM026L CAM050	CAM028L

Precision Cameras

Pan, Rotate, Zoom & Laser
CAM028L

Continuous 360° rotation +/-135° pan, 12x digital zoom, 10x optical zoom.

Features an integral distance sensor & two aligned lasers to enable accurate pipe diameter, defect & object measurement.

6 High powered ultra-bright LEDs, heavy duty connector prevents ingression to the connections.

DSP (Digital Signal Processor) automatically adjust color color correction, image sharpening & white balance in realtime.

Technical specifications	
Pan & rotation	+/-135° / 360°
Zoom	12x / 10x
LEDs	6 LEDs
Pipe dia measurement range	90 - 600mm
Aligned laser spacing	30mm
Camera sensor	530 HTVL
Sensitivity	<1.0 Lux
Aperture/field of view	F1.8 - F2.9 / 46° - 4.6°
Maximum illumination intensity	12.5k Lux at 150mm
Pressure depth rating	1 bar (14.50psi)
Dimensions	155 x 84.5 x 84.5mm
Weight	1148g

Pan, Rotate & Laser
CAM026L

Continuous 360° rotation +/-135° pan.

Features an integral distance sensor & two aligned lasers to enable accurate pipe diameter, defect & object measurement.

6 High powered ultra-bright LEDs, heavy duty connector prevents ingression to the connections.

DSP (Digital Signal Processor) automatically adjust color color correction, image sharpening & white balance in realtime.

Technical specifications	
Pan & rotation	+/-135° / 360°
Zoom	Yes
LEDs	6
Pipe dia measurement range	90 - 600mm
Aligned laser spacing	25mm
Camera sensor	470 HTVL
Sensitivity	<1.0 Lux
Aperture/field of view	F2.5 / 75°
Maximum illumination intensity	12.5k Lux at 150mm
Pressure depth rating	1 bar (14.50psi)
Dimensions	132 x 73 x 73mm
Weight	865g

Precision Cameras

Pan, Rotate & Laser
CAM050

Continuous 360° rotation and +/-135° pan. Integral distance sensor & twin lasers to enable accurate pipe diameter, defect and object measurement. CAM050 is shipped with Minicam's SOLOPro+50 pipeline video inspection system.

Technical specifications	
Pan & rotation	+/-135° / 360°
Zoom	Yes
Pipe dia measurement range	greater than 60mm
LEDs	4
Image orientation	Self-levelling
Camera sensor	740 HTVL
Sensitivity	<1.0 Lux
Aperture/field of view	F2.5 / 75°
Maximum illumination intensity	12.5k Lux at 150mm
Pressure depth rating	1 bar (14.50psi)
Dimensions	72 x 46 x 50mm
Weight	570g

Pan & Rotate
CAM026

Continuous 360° rotation and +/-135° Pan, plus twin clusters of three high powered ultra-bright LED lights and a hard wearing, scratch resistant sapphire glass to protect the camera lens.

Technical specifications	
Pan & rotation	+/-135° / 360°
Zoom	Yes
LEDs	6
Pipe dia measurement range	90 - 600mm
Camera sensor	470 HTVL
Sensitivity	<1.0 Lux
Aperture/field of view	F2.5 / 75°
Maximum illumination intensity	12.5k Lux at 150mm
Pressure depth rating	1 bar (14.50psi)
Dimensions	120 x 73 x 73mm
Weight	861g

Precision Cameras

STAN ONE ®

Self-Levelling AXIAL
CAM027

Robust camera head with triple clusters of three high powered ultra-bright LED lights for optimum illumination and a scratch resistant sapphire glass to protect the lens.

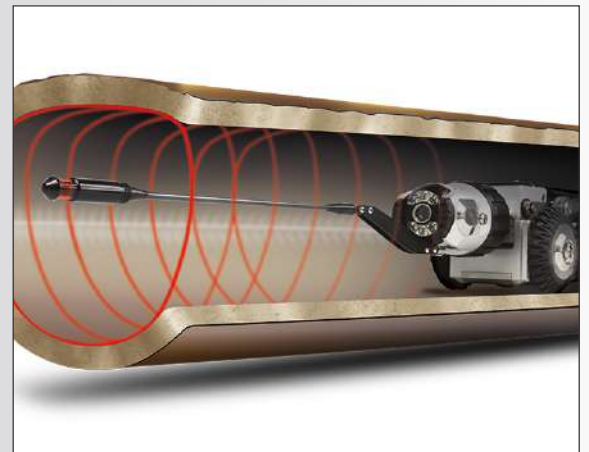| Technical specifications	
Pan & rotation	N/A
Laser	N/A
LEDs	9
Image orientation	Self-levelling
Camera sensor	470 HTVL
Sensitivity	<1.0 Lux
Aperture/field of view	F2.5 / 75°
Maximum illumination intensity	12.5k Lux at 150mm
Pressure depth rating	1 bar (14.50psi)
Dimensions	73 x 52 x 52mm
Weight	251g

PRO Laser
Laser Profiler Accessory

If you are a municipality, consulting engineer or contractor the profiler is a necessary tool for the analysis of the true pipe condition prior to and after rehabilitation. When used as a video survey tool it can provide accuracy up to 1mm when measuring pipe size, deformation, erosion, encrustation, debris, grease, flows, lateral protrusion, surface damage, holes.

Standard Features :
• For pipes 100 to 500mm.
• Compatible with Proteus CAM026, CAM026L & CAM028L.
• Ideal for measuring real pipe diameters continuously along with the length of a pipe.
• Provides verification of structural integrity of the network, ovality and deep corrosion.
• Fast cross-sectional area calculations for determining flow reduction.
• Loss of pipe wall can easily be identified.

Compatible with Wincan EX pipe inspection & asset management software.

RMP200/RMP300

The RMP200/300 are Manual Cable Reels that are operated manually with a turning handle. Smooth pay-out and re-winding performance enhanced by the cable layering mechanism. Available in 250 & 350meter.

The RMP200 or RMP300 can be fitted on Portable Robotic Crawler trolley.
Note : Choose CAP250SC (250Meters inspection cable) or CAP350SC (350 meters inspection cable) at the time of ordering RMP 200/300 Or RMPL250 cable

Technical specifications		
Product code	RMP200	RMP300
Cable length	250m	350m
Dimensions	533 x 280 x 508mm	533 x 406 x 508mm
Weight	27kg	35kg
Ingress protection	Splash proof	Splash proof

RMPL250

The RMPL250 Reel is a Manual Cable Reel that is operated manually with a turning handle. Smooth pay-out and re-winding performance enhanced by the cable layering mechanism. Available in 250meters.

Technical specifications	
Product code	RMPL250
Cable length	250m
Dimensions	550 x 385 x 700mm
Weight	27kg

RAP200/RAP300

The RAP200/RAP300 are Semi-Automatic Motorised Cable reels, can be operated by one person. Providing 250/350 meters of inspection capability developed for the Van-fit system, equipped with three phase motor & cable layering mechanism, specially designed for uninterrupted, tangle free pay-out and re-winding.

Note : Choose CAP250SC (250Meters inspection cable) or CAP350SC (350 meters inspection cable) at the time of ordering along with cable reel.

Technical specifications		
Product code	RAP200	RAP300
Operation	3 phase motor	3 phase motor
Cable length	250m	350m
Dimension (in mm)	533 x 317 x 508	304 x 431 x 508
Weight	30.5kg	40.5kg
Power supply	24V	24V
Ingress protection	IP45	Ip45
operational remote controller	RJP/RCP4	RJP/RCP4

ACR350/ACR500

The ACR350/500 are Fully Automatic Cable Reels providing 350-500 meters of inspection capability, developed for the Van-fit system, equipped with three phase motor & cable layering mechanism, specially designed for uninterrupted, tangle free pay-out and re-winding of cable.

Roll out, roll in & stop of cable can be controlled using the (included) hand-held Bluetooth® joystick remote controller, which is also capable of controlling camera and crawler functions.

Technical specifications		
Product code	ACR350	ACR500
Operation	3 Phase motor	3 Phase motor
Cable length	350m	500m
Dimension (in mm)	660 x 300 x 650	660 x 550 x 650
Weight	42kgs	55kgs
Power supply	90 – 264 VAC	90 – 264 VAC
Power consumtion	600w	600w
Ingress protection	IP45	IP45
Remote controller (included)	RPJ joystick	RPJ joystick
Van guide pulley	VGP350 (optional)	VGP350 (Included)

LCR350

The LCR350 is a Lateral Cable Reel providing 350 meter of inspection capability, flexible 11 mm diameter push rod. Pays out matching the speed of the Proteus Lateral Crawler. Equipped with 3 phase motor.

The extendable arm of the guide roller has a 4-position locking system for the ease of deployment.
Fit for crawler Lateral150, installed in a Van-fit System.

Product code	LCR350
Operation	3 Phase motor
Payout / rewind	Cable layering
Emergency stop	mechanism
Stop button	In-built
Push rod length	45m
Cable length	300m
Cable type	Kevlar reinforced
Power supply	100-240VAC
Power consumption	600W
Dimension (in mm)	889 x 482 x 711
Weight	120kg
Van guide pulley	Integral

Control Unit CCU208

Feature Rich Control Unit

CCU208 Control unit is the brain of the Proteus system, providing functionality & control at your fingertips, Dual integral joysticks for camera & tractor control, user friendly multi-function hot keys control an intuitive on-screen display, to enable quick and accurate navigation of the numerous features.

Setup, Configuration & Characteristics

Set language, date & time, customize PDF reports, client information oriented reports generated on site etc. Easily and quickly configure the Proteus CCU to your specific requirements using the various menu options ;

- Adjust the frequency of the SONDE transmitter to 33kHz, 512Hz or 640Hz.
- Meterage reset key.
- Control unit is powered by only batteries or power supplied via adapter. battery back up ~ 5hours (depending on weather).

Media Management

Record inspection MPEG video & JPEG images, Review footage with zoom up to 3x on video playback, organize videos & images into folders, then find them using thumbnail gallery.

Generating, Accessing & Sharing Data

Generate detailed inspection reports along with a pipe graph, defects, material, location, size of pipe.

Offload Data
Copy reports, videos & images to USB or SDHC directly from Control unit

Share Files
WIFI enabled to allow remote access to stored images and data. Users can instantly share PDF reports,images and footage via email or upload WinCan Reports via the Cloud to WinCan Web for secure, immediate team-wide access online.

Powerful measurement tools let you size up cracks, water level, pipe diameter, wall features, bend angles, inclination graph of pipeline.

The left joystick controls crawler manoeuverability. Movement of the camera module is smooth & effortless using the right hand joystick control.

For Vehicle Mounted System

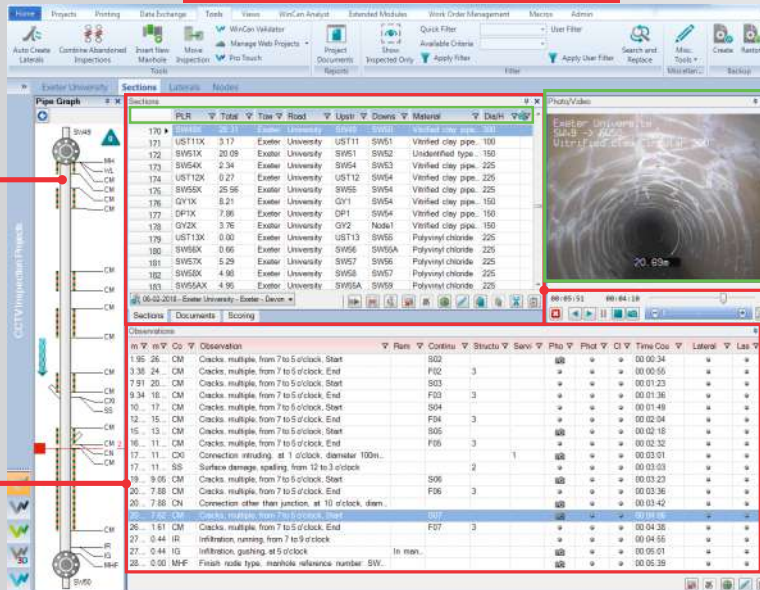# PC Reporting Software

STAN ONE ®

WinCan VX is a **Pipe Inspection & Asset Management** software which is core of the entire WinCan product family.

Offers pipe inspection data, organise it into a database & generate inspection reports that **(3D pipeline graph)** graphically display the pipe and its defects etc.

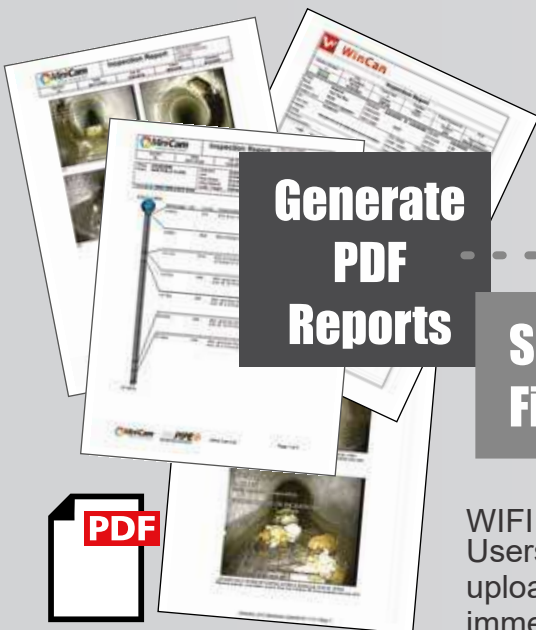**Provides Comprehensive inspection**

Software Interface

3D graph of pipeline along with pinpointed

Observations Detailed defects report with Images & Video.

Video playback & still photos.

(GIS)Geographic Information System can be used to display the location, condition, and other important information about pipes and other underground infrastructure.

Generate PDF Reports

Share Files

3G 4G +

WIFI + 3G/4G enabled to allow remote access to stored images and data. Users can instantly share PDF reports, images and footage via email or upload WinCan Reports via the Cloud to WinCan Web for secure, immediate

STAN ONE ®

CRP300

Crawler CRP300 build :

+ Trolley
+ CCU208 Control unit
+ CAM028L
+ RMP200(250m) or RMPL250(250m)
+ CAP250SC Inspection cable
+ Battery BPP24 (5hours uptime)
+ CEP300 camera elevation attachment (for entering in upto 2200mm dia pipes)
+ LEDs Aux pod
+ ProLaser (Laser profiler)
+ Wide axle wheels
+ Extra weight plates

+ Bigger wheel options :
• QRW250 or XL
• Pneumatic Balloon Wheels 250mm & 250mm XL.

Recommended Van-Fit Builds

Recommended for larger and more complex inspection projects.

They are typically mounted on a dedicated vehicle.

Van mounted system includes Tractor crawler, Motorised semi-automatic or Fully automatic cable reels, van-fit control unit with Dedicated cabin space, Pressure water & air pressure gun for cleaning the equipment after inspection.

Crawler Van-fitted build :
+ Customised Van or Mini-truck
+ Push camera System (SoloPRO+)
+ Crawlers : CRP90, CRP140, CRP300
+ Control unit VCU500 (Rack mounted), VKU500 (Desktop keyboard unit for van)
+ CAM028L & CAM050L
+ Cable reel ACR 500 meters
+ Lateral pin kit
+ ProLaser (Laser profiler)
+ WinCAN expert pipe Inspection & Asset management software
+ Brick egg stabilizer accessory, (prevents crawler from rolling.)
+ CEP300 & PCC01 (Crawler Extenders)
+ CCE01 (Camera extender)
+ Van guide pulley VGP200/350/500
+ Cable pulley guide CGP01
+ Cable reel guide CGP200/300
+ Extra weight plates
+ Additional wheel sizes

STAN ONE ®

Professional Grade Products

Best In Class Warranty Programmes

Product & Service Training

Regd. Office:
Asian Contec Ltd.
Asian Centre, B-28, Okhla Industrial Area, Phase-1,
New Delhi -110020, India.

Contact Nos.:
Tel : +91-11-41860000 (100 Lines),
Direct Sales Helpline : +91-11-41406926
Web : www.stanlay.in   www.stanlay.com
email: sales@stanlay.com

Regional Offices :
• Faridabad • Lucknow • Mumbai • Ahmedabad • Bengaluru
• Hyderabad • Kolkata • Bhubaneswar • Guwahati

Catalogue Version : ST/CRP300/2023

www.stanlay.in