

Gimbal X-Ray Tri-Pod

This is an introduction of the use of the Gimbal X-Ray Tri-Pod (GXT-Standard ®) equipment for non-destructive on-stream Radiography thickness and flaw measurements on chemical-, refineries-, power-, gas-, and water-plants.

The growing certification market constantly demands for quicker, safer and efficiently working methods. This is the basis for the development of a new tooling where the demands were to reduce time, upgrade safety and accessibility.

This product was developed within this framework, taking in consideration the customers demand.

If Radiographic pictures are needed on site, there is a lot of preparation (and time) needed before one can start and if the position of the picture is above 2.50 meters, scaffolding is needed to reach the position. In that case security measurements are required and specialized personal will be involved.

Based on the inspection plan the following will be executed

- The inspector investigates the request and will
 - Produce an order for scaffolding
 - Plan the work to be done
 - Wait until scaffolding is build
- The Quality and Safety manager will
 - Investigate Quality and Safety of the scaffolding
 - Gives ok to proceed
- After ok the inspector will
 - Produce an NDT order
 - Plan the work
 - Execute together with NDT the work to be done
 - Waits for results of the picture
 - Produce management report
 - Remove scaffolding
 - Wait until scaffolding is removed
 - Give ok when position is cleared



By using the GXT-Standard ® equipment the inspection company will benefit from the following:

(Time)

Reduce time-loss in building and removing scaffolding and/or rope access

Reduce time-loss in setting up measurement equipment, climbing up-down scaffolding with measurement equipment

(Accessibility)

Direct access to position after film is made, no remaining obstacles

(Safety)

Reduce the (working) dangers in using scaffolding and/or rope-access.

Non-hazardous mechanical equipment

(Quality)

International Certified equipment

(Business benefit)

Upgrade number of films per working session

Higher yearly turn-over

(Improvement)

Training program by Allturn Group International BV

(Service)

Equipment service program

By using an inspection company that makes use of the GXT-Standard ® equipment the customer will benefit from the following

(Time)

Quick response to unforeseen critical maintenance (certification) requests

Fixed budgeted cost price per film.

(Safety & Maintenance)

Prevent non-accessibility to critical maintenance equipment during longer period.

Prevent unnecessary scaffolding equipment standing on plant, increasing accessibility safety.

(Quality)

Decrease processing time on measurement requests

Cut-back of quality managers time of certification of scaffolding

(Improvement)

Access to currently difficult or non-accessible locations

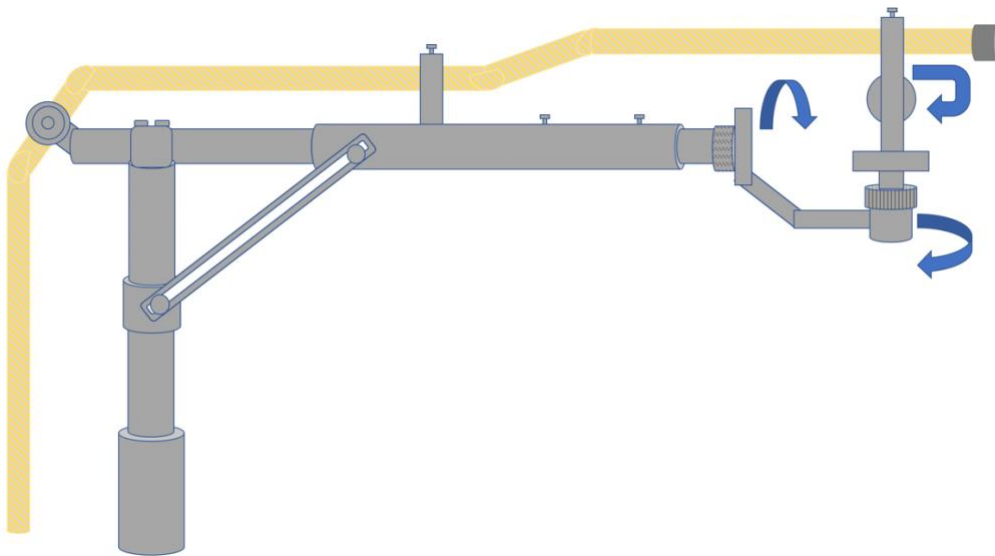
No damage to insulation caused by inadequate isotope clamps



The patented equipment involves placing the isotope in the required position using a CE certified 3-Axe Gimbal and a CE certified crank tripod and the film with a specially developed hinged film holder on a telescopic pole.

For inspection purposes it is possible to add an inspection camera to make pictures of the position or to use as separate inspection unit. If used as an inspection camera, it is possible to steer the camera if it mounted on the Gimbal direct.

The Gimbal is steered with a Software Application that can be installed on various Mobile Phones, using Bluetooth Connection. A separate remote control is available.



(Gimbal Construction)



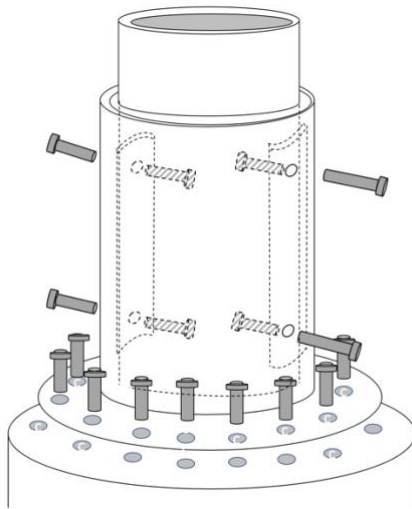
(3-axe Gimbal)



The batteries used in the Gimbal can be used up to 9 hours to ensure working continuity and can be replaced on the job using spare batteries.

Depending on the tri-pod installed, heights up to 20 meters (and more) are possible (see table). The tri-pods can be used under windy conditions with wind up to 80 km/p/hour.

The Gimbal construction is secured on the Tri-Pod using a stabile connection holder.



(Connection holder and Tri-Pod)



Customized height						
Model No.	Extended height(m)	No. Of section	Retracted height(m)	Outer tube range(mm)	Self weight (kg)	Max.payload (kg)
TAL-M3-1-20	3	3	1.0	70-90	15	20
TAL-M4-1.5-30	4	3	1.5	50-80	15	30
TAL-M4-1-20	4	3	1.0	70-90	16	20
TAL-M4-1.6-10	4	3	1.6	60-80	14	10
TAL-M5-1.65-10	5	4	1.65	50-80	17	10
TAL-M5-1.2-15	5	5	1.2	40-90	20	15
TAL-M5-1.5-60	5	5	1.5	50-90	20	60
TAL-M5-1.7-100	5	6	1.7	60-130	35	100
TAL-M6-1.7-10	6	5	1.7	50-90	21	10
TAL-M6-1.5-100	6	6	1.5	60-130	40	100
TAL-M6-1.3-60	6	7	1.3	40-130	32	60
TAL-M7-1.8-30	7	7	1.8	40-105	23	30
TAL-M8-1.5-20	8	8	1.5	40-130	34	20
TAL-M9-1.8-40	9	7	1.8	40-105	25	40
TAL-M9-1.8-30	9	7	1.8	40-105	25	30
TAL-M9-1.8-100	9	7	1.8	60-160	43	100
TAL-M9-1.9-5	9	7	1.9	30-90	25	5
TAL-M10-1.95-10	10	7	1.95	30-90	26	10
TAL-M10-2-40	10	7	2	30-105	31	40
TAL-M12-2.2-10	12	7	2.2	30-90	28	10
TAL-M12-2.1-15	12	7	2.1	30-90	28	15
TAL-M12-2-40	12	8	2.2	40-130	44	40
TAL-M15-2.45-10	15	8	2.45	30-105	33	10
TAL-M15-2.6-35	15	9	2.6	30-130	40	35
TAL-M15-2.5-200	15	7	2.5	70-200	200	70
TAL-M16-2.6-10	16	8	2.6	30-105	35	10
TAL-M18-2.7-10	18	9	2.7	30-130	47	10
TAL-M18-3.2-30	18	9	3.2	30-130	48	30
TAL-M18-3.7-100	18	7	3.7	50-130	47	100
TAL-M20-2.95-10	20	9	2.95	30-130	55	10
TAL-M20-3.20-20	20	8	3.20	40-130	58	20
TAL-M22-3.15-10	22	9	3.15	30-130	58	10
TAL-M25-3.4-10	25	10	3.4	30-150	72	10
TAL-M25-3.5-250	25	10	3.5	80-280	90	250
TAL-25-3.6-20	25	9	3.6	40-150	71	20
TAL-M30-3.85-10	30	10	3.85	30-150	84	10
TAL-M35-4.5-25	35	10	4.5	40-180	130	25

(Height Table Tri-Pods)

The equipment can be setup within 10 minutes and is delivered in a solid transport box to protect the equipment during transportation to the site.



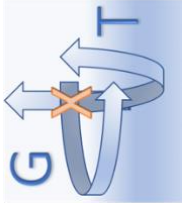
(Transport box)



The GXT-Standard ® equipment is World-Wide Patented in Bern, Switzerland under number 00240/06 (art.46 Abs.5 PatV) voraussichtliche Klassen : F16M, G01N, Swiss Federal Institute of Intellectual Property.

If you want to know more about this ground breaking new GXT-Standard equipment and how it can improve your business then please contact the following person:

Allturn Group International BV
Managing Director
Rudy Vriendts
Tel: +31 620356751
E-mail: Rudy.Vriendts@AllturnGroup.com



GXT-Equipment												
Part Description	Include	Option	Model No.	Extended height(m)	No. Of section	Retracted height(m)	Outer tube range(mm)	Self weight	Max. payload	Tilting Angle	Rolling Angle	Panning Angle
TRI-POD	✓	higher possible	TAL-M9-1.8-30	9	7	1.8	40-105	25 kg	30 Kg			
Transport box TRI-POD		✓	GXT-Box					55 kg				
Ground-Plate		✓	GXT-Ground									
Wheels for Tri-Pod		✓	GXT-Wheels									
Gimbal	✓		AK-4500					1,656 kg	4,6 Kg	230 Degr	360 Degr	360 Degr
Transport box Gimbal	✓		AK-Box									
Connection Slide Gimbal	✓		GXT-Slide									
Battery (10 Hours)	✓		318.650									
Battery Charger	✓		321.653									
Spare battery (10 Hours)	✓	✓	318.650									
Software App	✓		-	12	7	1,8			9 kg			
Hinged Film Holder	✓		GXT-FH-01									
Remote Control	✓	✓	RC-100									
Inspection Camera		✓	CC-100									
Laser Distance device		✓	DD-100									
Training 2 Persons (certified)	✓		Training									
Extra Training (certified)		✓	Training									
Instruction Manual	✓											
Safety Manual	✓											
Service Contract (1 x Quarter)	✓											
Replacement Service (24 Hrs)	✓											
Replacement Service (8 Hrs)	✓	✓										
Delivery on Site	✓											
Hire Contract (6 Months)	✓											
Hire Contract (12 Months)	✓	✓										
Hire Contract (24 Months)	✓	✓										
Hire Contract (36 Months)	✓	✓										