

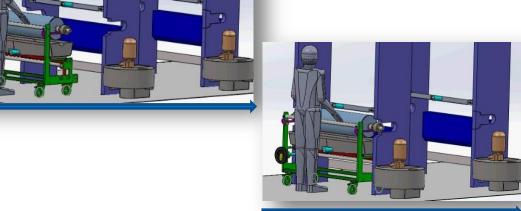
NEW SERVICE "TP" TROLLEY FOR QUICK INKING
CHANGEOVER SYSTEM AND
EASY INKING DEVICE FOR INK SAVING

#### **TP** TROLLEY SYSTEM

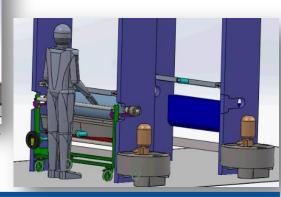
- The service TP trolley has been studied, conceived and designed to allow all gravure printing machines, not only reserved to the newest generation of machinery, to be able to benefit of time-saving technological innovations which reduce the dead times during job changeover and reduce the quantity of ink in circulation thus left-over ink stock.
- The innovation relates to a service trolley outside the printing unit and does not require changes to the structure of the printing unit itself.

### TP TROLLEY SYSTEM - WORKING SEQUENCES



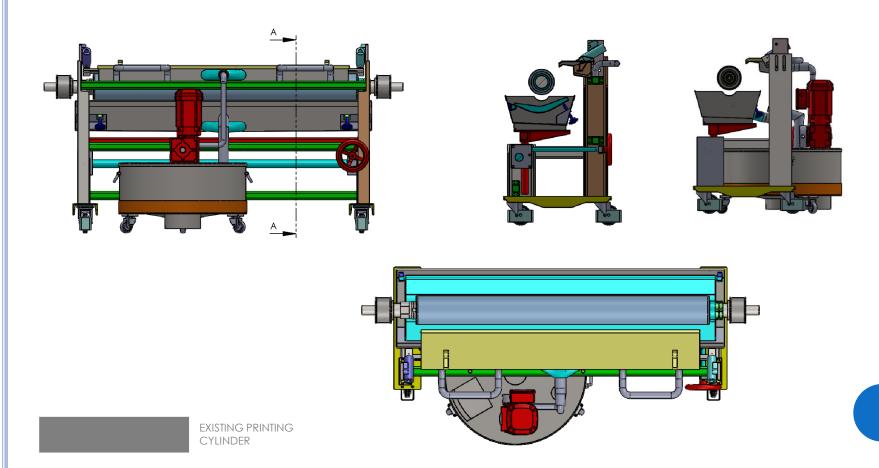






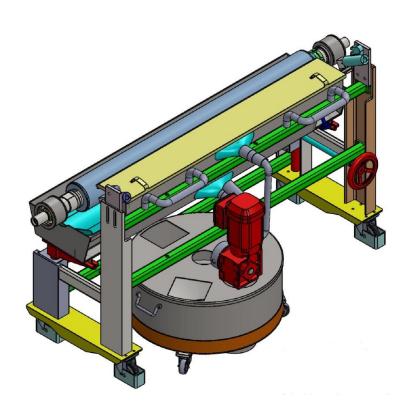
### THE **TP** SYSTEM — COMPONENTS ON THE TROLLEY EXCLUDED THE PRINTING CYLINDER

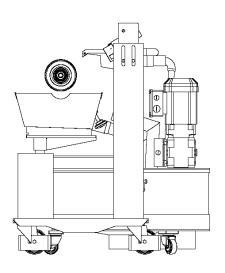
Concept: Trolley complete with ink tank



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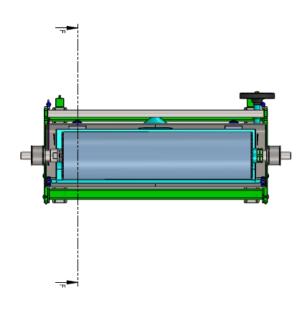
Concept: Solution with trolley holding the ink tank

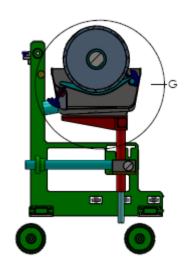


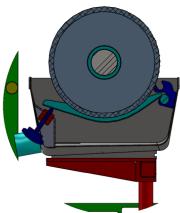


### THE **TP** SYSTEM — COMPONENTS ON THE TROLLEY EXCLUDED THE PRINTING CYLINDER

#### Easy-Inking concept:







### THE **TP** SYSTEM — WITH EASY INKING DEVICE

#### Benefits deriving from using Easy Inking device:

	STANDARD SYSTEM	TP TROLLEY SYSTEM	Saving
Ink volume in circulation when using the standard inking system and considering a printing cylinder circumference from 400 to 550 mm.	5,45 liters	2,89 liters	- 47% of ink
Ink volume in circulation when using the standard inking system and considering a printing cylinder circumference from 400 to 550 mm.	5,20 liters	3,44 liters	- 34% of ink

# Benefits deriving from the use of TP trolley system Comparing the dead-times during job changeover between a Standard system to the New TP trolley system

Calculation made assuming an 8 colour press

STANDARD SYSTEM	TP TROLLEY SYSTEM
Time used for job changeover  From 1,50h up to 3/	TP trolley system: Approx.  5 MINUTES FOR EACH PRINTING UNIT.
	→ Nairto 123 T G R 2 A G I T R II T

## COMPARING THE STANDARD SYSTEM TO THE NEW TP TROLLEY SYSTEM

Calculation made assuming an 8 colour press

#### STANDARD SYSTEM **TP** TROLLEY SYSTEM HOURS CONVENTIONAL SYSTEM TP TROLLEY SYSTEM AVERAGE TIME CONSUMPTION DURING JOB CHANGEOVER ON DURING ONE YEAR 3500 3500 3000 VERAGE TIME CONSUMPTION DURING JOB CHANGEOVER ON DURING ONE YEAR 3000 2500 2000 2000 1500 MACHINE AT A COMPLETE STOP 1000 1000 500 500 TOTAL TIME CONSUMPTION UNDER 100 HOURS TOTAL AVERAGE TIME CONSUMPTION FOR JOB CHANGEOVER

### COMPARING THE STANDARD SYSTEM TO THE NEW TP TROLLEY SYSTEM

### Calculation made based an 8 colour press TOTAL ANNUAL BENEFIT

