GLASS MACHINES TRAINING

from "old schools" to the Instagram Generation

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a long time ago

Long long time ago...
in many glass industries
there were real

GLASS MACHINES
APPRENTICES
SCHOOLS

OK, maybe not so much time ago...

These "schools" were an ideal setting to learn

- Silence
- Dilated time
- Machines or sections
- Knowledge

The philosophy of these schools

"No hurry! It takes months to train a good machine operator (and we can wait…)"

Species under extinction...

With the passage of time...

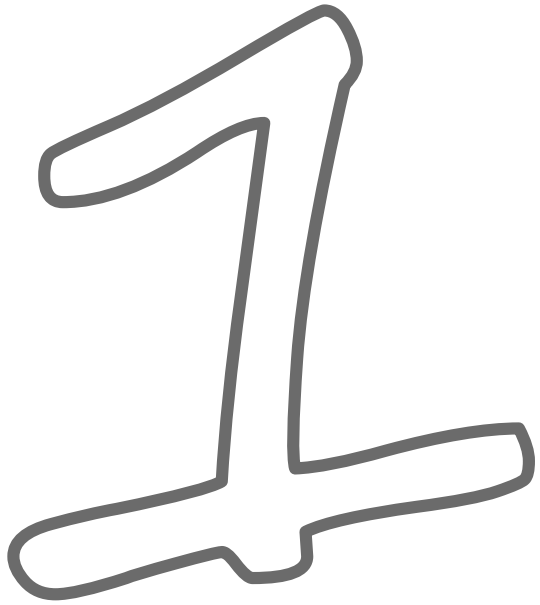
- Economic scenarios
- Generations and habits
- Learning techniques

change, mutate, evolve

And now, the philosophy has changed…

"Hurry up! We need good machine operators right now! (and we can't wait!)"

The reasons for which the "schools" were created are always present



Good machine operator

=

Good (and safe) production

Glass machines are still:

- Complex
- Whimsical
- Dangerous

… and even today we need essentially two things to create a skilled operator

- Knowledge
- Time

How to reconcile these apparently opposite needs with the lack of time (and schools)?

All glass industries organise an "on-the-job supervised training" with the support of more experienced workers

The new operator begins **simply watching** what others do and, step-by-step, learns to do **more and more complex tasks**

Problem #1

Who controls the "teacher"?

t_0

Problem #2

Environmental conditions

Typical solution…

Written procedures

Side effect…

This is Alfredo, my 15 YO son

twitter

WhatsApp

Instagram

facebook

What these tools can teach us and how are they changing the way we collect information?

Fragmentation
Visual
Short

In Bormioli Rocco we are working towards a different and more friendly approach to safety training

Bormioli Rocco

Other solution:

Glass Machine

- Videotutorials
- Videoinstructions
- Illustrated booklets

In the range of a more comprehensive project named

"MISSIONE LAVORO SICURO"

(Mission: Safe Work)

Videotutorials

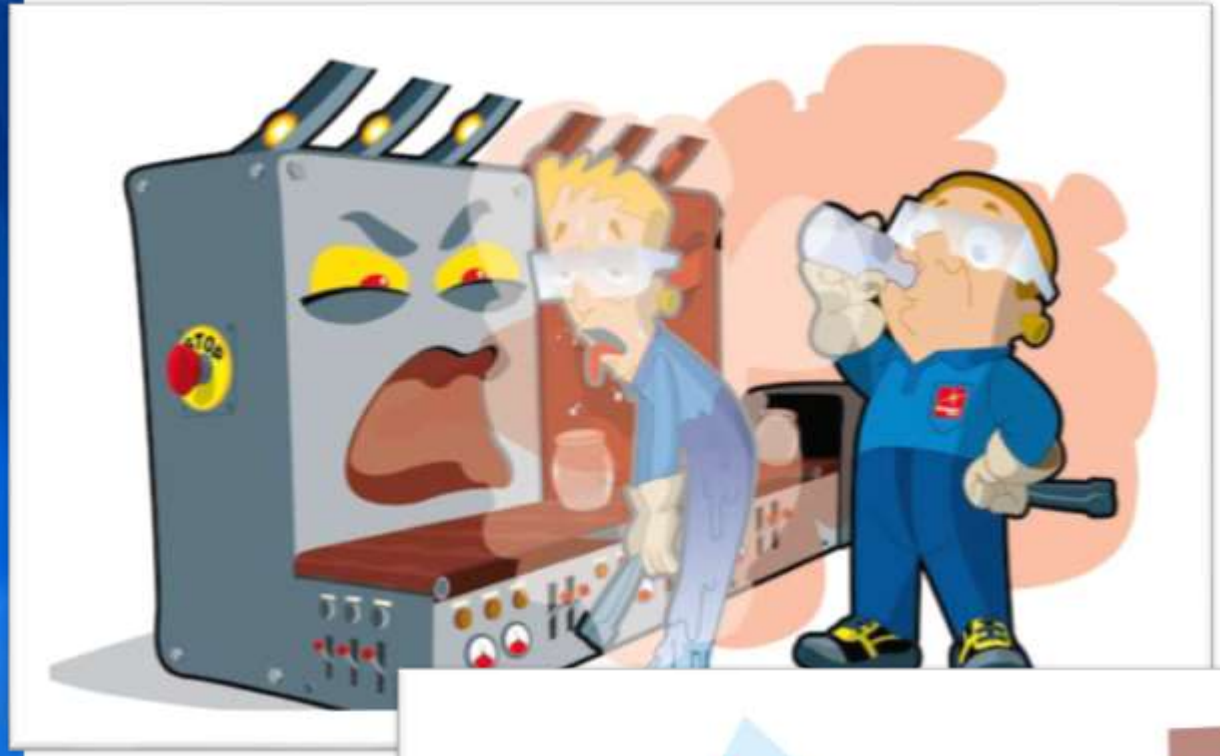
- Show how different glass machines (IS, H28, presses, …) work
- Explain to new workers the shared terminology

Bormioli
Rocco
03:43

Bormioli
Rocco
Punzone
(Plunger)
01:29

Illustrated booklets

Describe and remind the main safety rules to be observed during the job



Videoinstructions

- Explain how to perform critical operations (e.g. machine lubrication, moulds' change, …)

- Are the basis for "on-the-job" training

Bormioli
Rocco
UN PROTOTIPO. NON UTILIZZARE PER FORMAZIONE
04:05

Videoinstructions

Priorities

Table 5.1 Decision aid to determine level of support required (based on a table supplied by A.G. Foord and W. Gulland, private communication)

Task criticality	Low			Medium			High		
Task familiarity	Frequent	Infrequent	Rare	Frequent	Infrequent	Rare	Frequent	Infrequent	Rare
Task complexity:									
Low	NWI	NWI	NWI	NWI	NWI	JA	NWI	NWI	JA
Medium	NWI	NWI	NWI	NWI	NWI	JA	NWI	JA	SBS
High	NWI	NWI	JA	NWI	JA	SBS	JA	JA	SBS

NWI = No Written Instruction required
JA = Job Aid required (for example, check-list / memory aid)
SBS = Step-By-Step instruction required

Cons

This tool requires more time and energy than a traditional procedure…

Pros

- Anywhere, anytime
- Direct and efficient
- Learning support
- Easy-to-find technology