

**SYMPOSIUM 1 - BBS, A CONTINUOUS PROCESS
HOW TO ADAPT AND TO MAINTAIN IT (27TH JUNE)**

Extending a BBS process in Poland starting from the Italian plant practice

Marco Tremolada

Weir Gabbioneta Srl, Sesto San Giovanni

ABSTRACT

After the very good result reached with BBS process in enhancing safety level in the workshop of its Italian plants, during 2013 Weir Gabbioneta management decided to set up a BBS process also in the Weir Gabbioneta Poland plant based in Myszkow.

In Italian and Polish plants working activities are very similar, but layout and cultural background are different (e.g. the spoken language).

The challenge was to keep the experience of the Italian BBS process and to adjust a new BBS process in the Polish reality in order to achieve the same success in obtaining a safety culture.

Keywords: Adjustment, BBS Maintenance, Cultural challenges, Safety culture

WEIR GABBIONETA PRESENTATION

The Company was founded in 1897. Since 1970, the Company has dedicated itself to the design, manufacture and maintenance of centrifugal pumps for the oil and gas market, manufactured in compliance to the API standards.

Our pumps are designed and built to meet the highest construction standards in terms of strength, reliability and performance.

The company's main production facility is located in Sesto San Giovanni (Italy), on the outskirts of Milan, and boasts a modern and fully-equipped workshop extending over an area of 19,000 square metres. The production facility in Cinisello Balsamo (about 2 km from Sesto San Giovanni plant) covers an area of approximately 5,000 square metres. In the two plants are employed about 300 people, workshop main activities are machining, welding, assembly and testing.

The Company assumed its current name in January of 2006, after being purchased by Weir Group PLC. This led to an excellent HSE focus in Weir Gabbioneta:

“The Weir Group is committed to excellent environmental, health and safety (EHS) performance. Keeping each other safe is the most important thing we do as managers, colleagues and customer and supplier partners” [Keith Cochrane, Weir Group CEO]

On the way to HSE excellence, since May 2012 Weir Gabbioneta implemented the scientific protocol B-BS.

In 2012 a new production facility was inaugurated in Poland, which is dedicated to the construction of R-type and vertical Gabbioneta brand pumps, as well as Begemann brand pumps. In the plant employing about 50 people main activities are machining, welding, assembly and testing.

THE CHALLENGE

After the very good result reached with BBS process in Italian plants, during 2013 Weir Gabbioneta management decided to set up a BBS process also in the plant based in Myszkow (Poland) to have the same safety level and a common safety culture in all Gabbioneta plants.

The challenge was to keep the same pillars that led to success in Italy adapting them to Polish reality so to have the same success in obtaining a safety culture.

According to the BBS scientific literature and to our experience, one of the main reasons that determined the success of BBS in Weir Gabbioneta Italy has been the *bottom up* approach during the design of the process: the Italian design team included both workers and managers, that with the help of a behaviour analyst, decided all the details of the process starting from BBS principles. Since the beginning, the team found a common sense and appreciated the approach.

We wanted to follow the same path for Poland but this raised a problem: on one hand how to guarantee the self-determination we wanted to leave to Polish workers in designing their own process and on the other hand how to drive them to undertake similar rules of the Italian BBS process in order to assure the same results and the same values all over the company.

We realized that the design was to be balanced between continuity and adaptation but worried about the challenge: is it better to set up a new process or to “translate” the existing and working one in Polish?

CONTINUITY VS ADAPTATION

The issue was rapidly solved by the Poland design team itself: they considered Italian practices as an opportunity to treasure experience and not as an imposition.

Elements of adaptation

The Mission: we wanted them to write their own BBS mission to make it feel "theirs" and to address problems identified in their assessment (e.g. incomplete registration and completion of the safety actions; incomplete registration of first aid cases)

Values: We could not translate the Italian one because they would have sound weird to them. We prefer they found their own Polish "proverbs, slogans, idioms", coming from their culture;

Pinpointing: We leave them to define the safe behaviors and then we compared their checklist with Italian ones in order to have consistency on main relevant behaviors and to avoid reinforcing different behaviors in the two processes.

Elements of continuity

Rewarding system: Because of the success of the Italian rewarding system, we proposed (and obtained) to use the same criteria and same budget for rewarding workers, observers, leaders through the token economy. The Management opted for this solution also for fairness reasons.

Coaching and review: HR and HSE Italian manager attended all the design days. This assured a continuous supervision and a visible commitment on the project

Observer Training: we used the same video for training observers because activities and behaviors are very similar

Double language: All documents, including behavioral checklist, have been written both in Polish / English, to maintain a supervision of the Polish BBS contingencies

In few words, Poland design team decided for continuity with Italian process about many issues: this is allowing us to build a common safety culture and to avoid that Polish workers think that we didn't care about their safety as we did in Italy.

As far as I can understand reasons of this initial and determinant success are mainly:

- Design team attended an effective training session before the design phase and this achieved an alignment on behavioral principles: in this way at the moment of decision every design team member around the table felt comfortable about the process and looked forward to beginning with.
- Plant manager's leadership attended to every design team meeting: her commitment was very visible; the team was focused on building up the best process without any prejudice.
- All design team members understood English and could speak it a little, even if some of them were operators and safety leaders not at management level: we found a good language knowledge that permitted us to have a good reciprocal understanding and team working

THE RESULT

In balancing between continuity and adaptation, design team decided to have a brand new Mission in order to make people feel their own process. New values in order to meet polish culture. We performed a new assessment, despite activities are the same as in Italy we wanted to build a new process. Indeed we found some specific issue to be addressed: poor registration of near miss and first aid, not systematic management of safety issues with a record and a fixing program.

Checklists were built by design team considering Italian ones and very similar to that, checklist are written in Polish and English, than double checked in order to avoid reinforcing different behaviors.

We succeeded to start up BBS process in Myszkow plant in January 2014, result are now giving us first feedback of a good job done (see picture below): process is well performing mainly thank to a local supervisor that takes care of the overall process with some help from Italian headquarter.

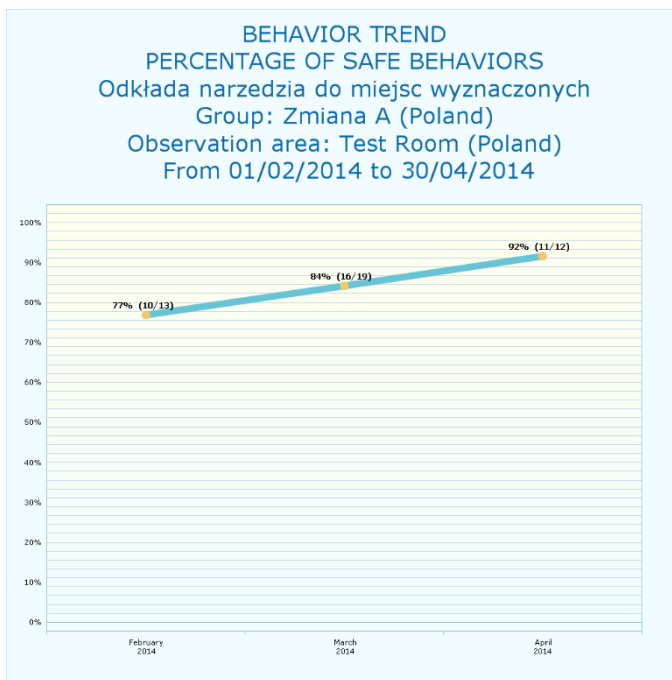


Figure 1 Safe percentage trend of “Putting tools and equipment in standard positions” within the Shift A

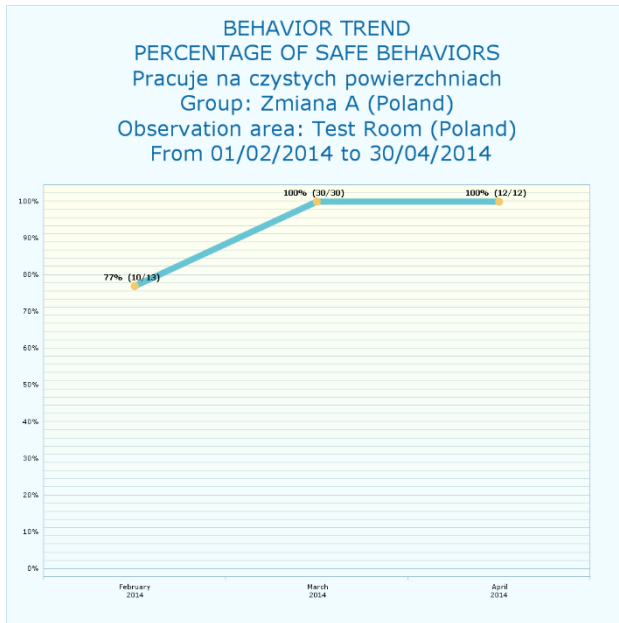


Figure 2 Safe percentage trend of “Working on clean surfaces” within the Shift A

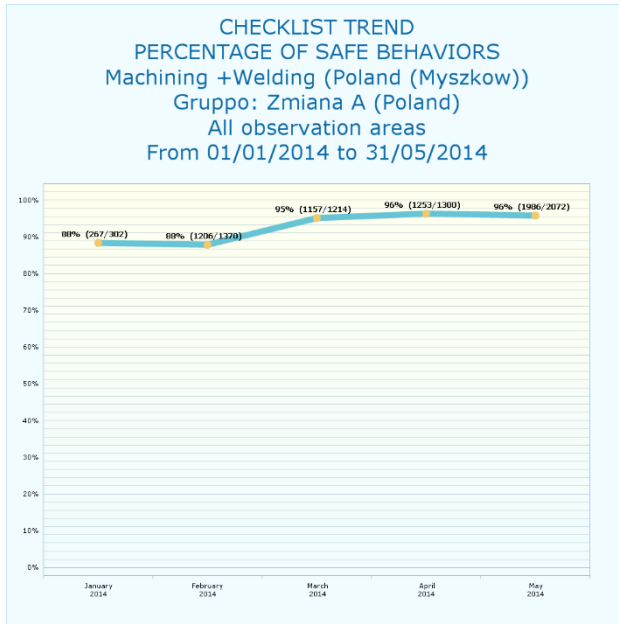


Figure 3 Safe percentage trend of all Safety behavior within the Shift A in Machining and Welding Depts.

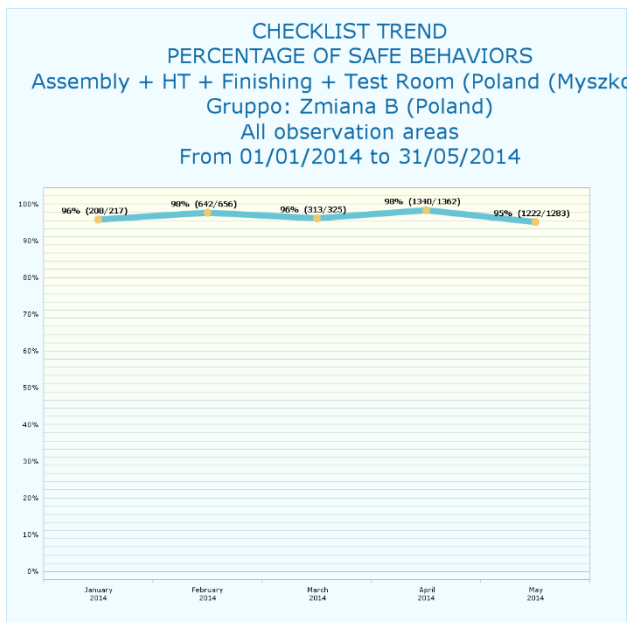


Figure 4 Safe percentage trend of all Safety behavior within the Shift B in Depts. of Assembly, HT, Finishing, Test Room

REFERENCES

- 1) Seregini. L'efficacia di goal-setting e feedback nel migliorare i comportamenti obiettivo. 9th AARBA International Conference, 2013.