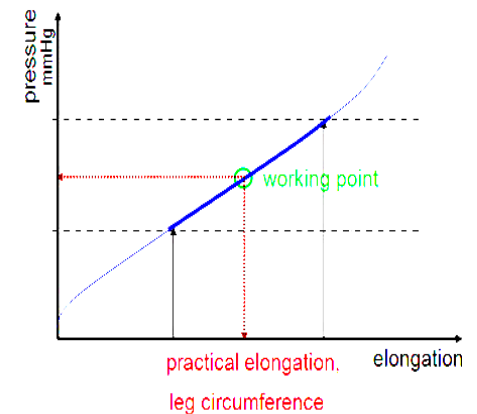


# Ranges of stiffness



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# issue #1

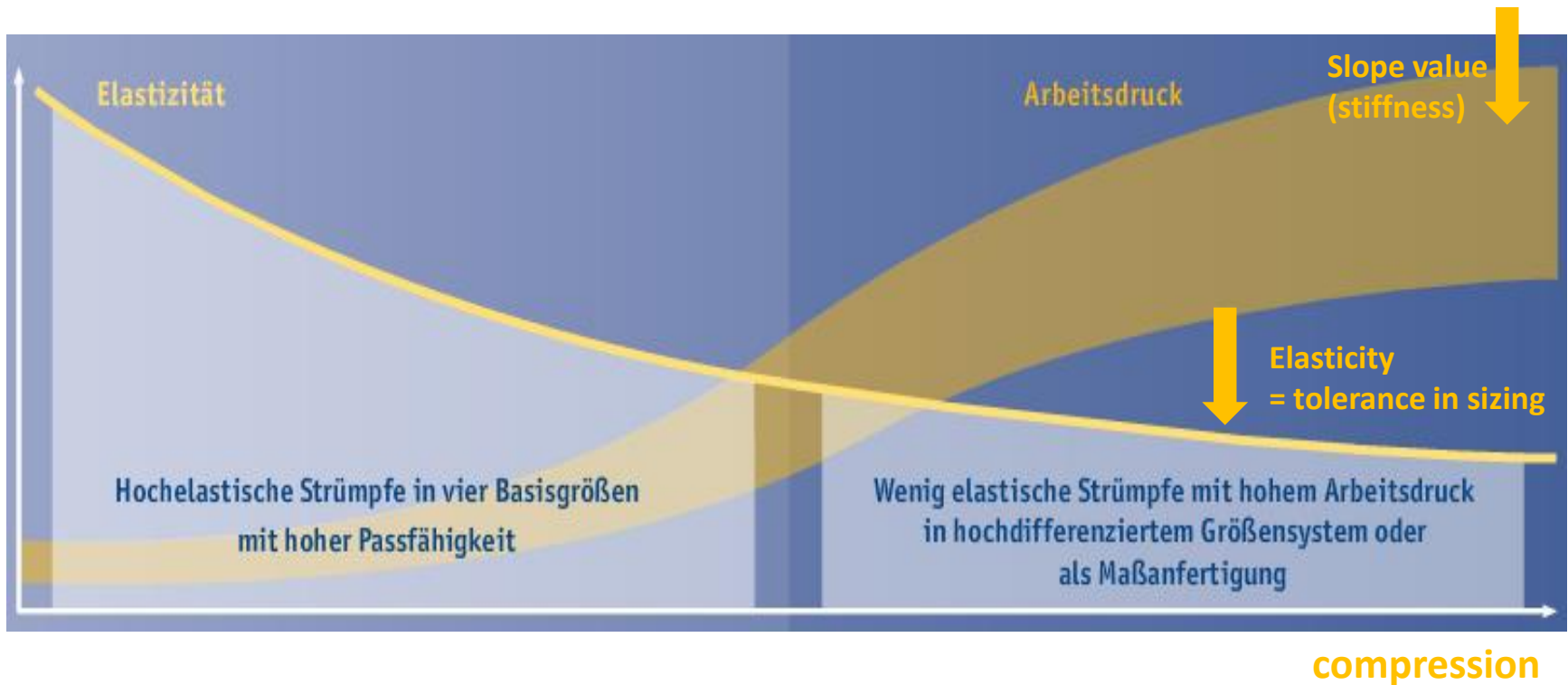
Phone call:

„ A competitor of you has flat knitted stockings with a stiffness-value of 5.5.  
We'll take your stockings in the future only then, when you have at least 5.5...“

Questions arise:

1. Do we have a new competition?
2. What is the competitors measuring procedure?
3. To which compression class belongs this value of 5.5?

## Issue #2 physical law



→ The advantage of higher stiffness “has to be paid” by lower elasticity and following smaller tolerances for best fitting stockings

## Issue #3 stiffness-rigidity

Stiffness is discussed as to be necessary especially for lymphedema treatment.

→ What is meant with „stiffness“ in this context? Is it necessary to apply MCS with „slope values“ for Lymph-treatment?

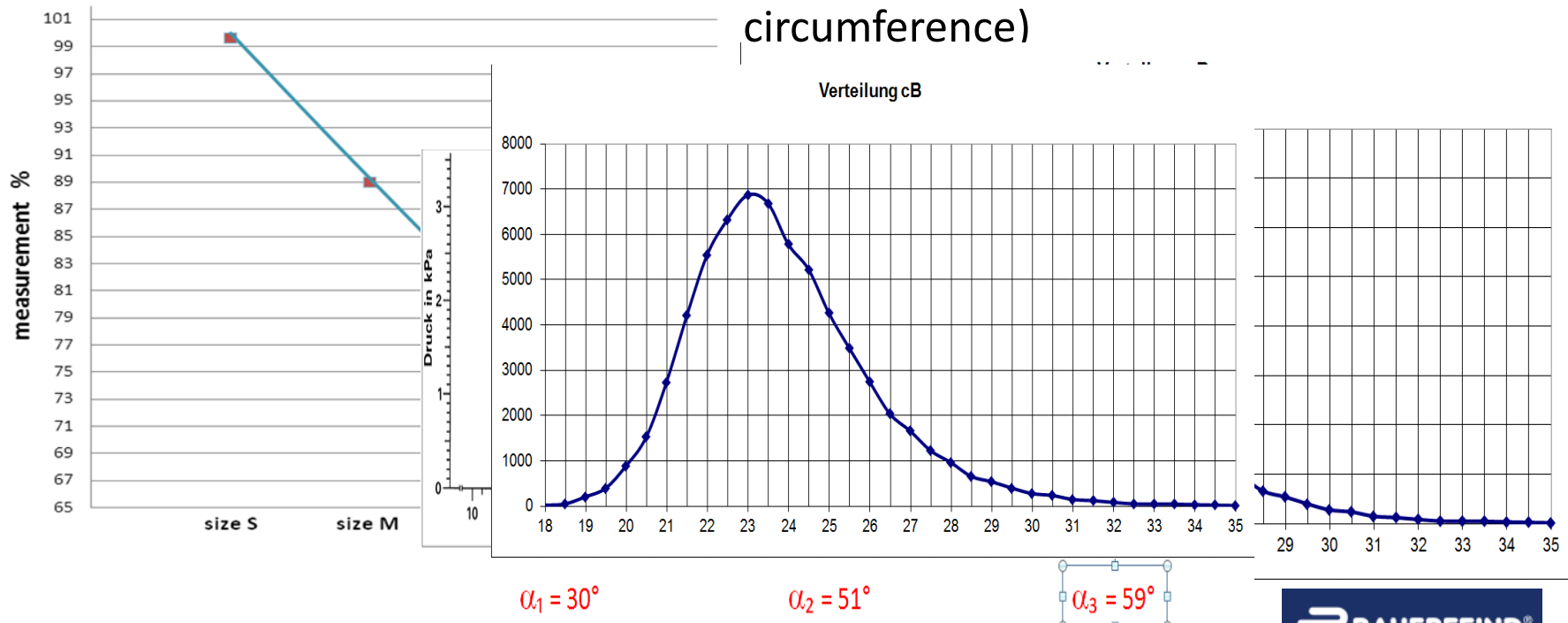
As I know there is no data available that lymphedema are better treated with high-stiffness stockings.

→ Or do we need stiffness as material property in terms of rigidity?

# Issue #4 measuring the physical parameter slope value(stiffness)

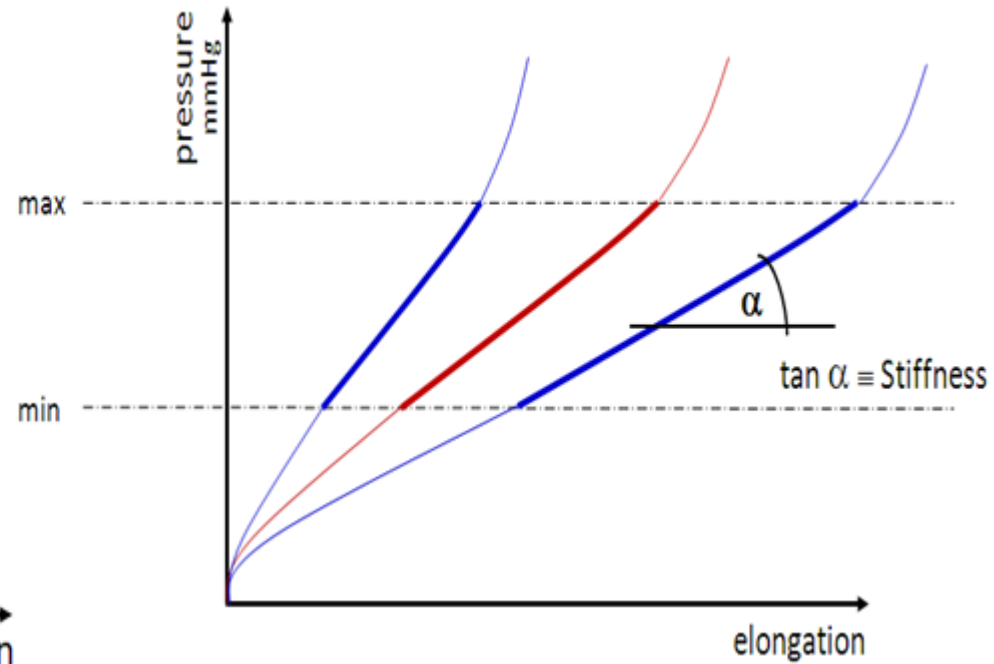
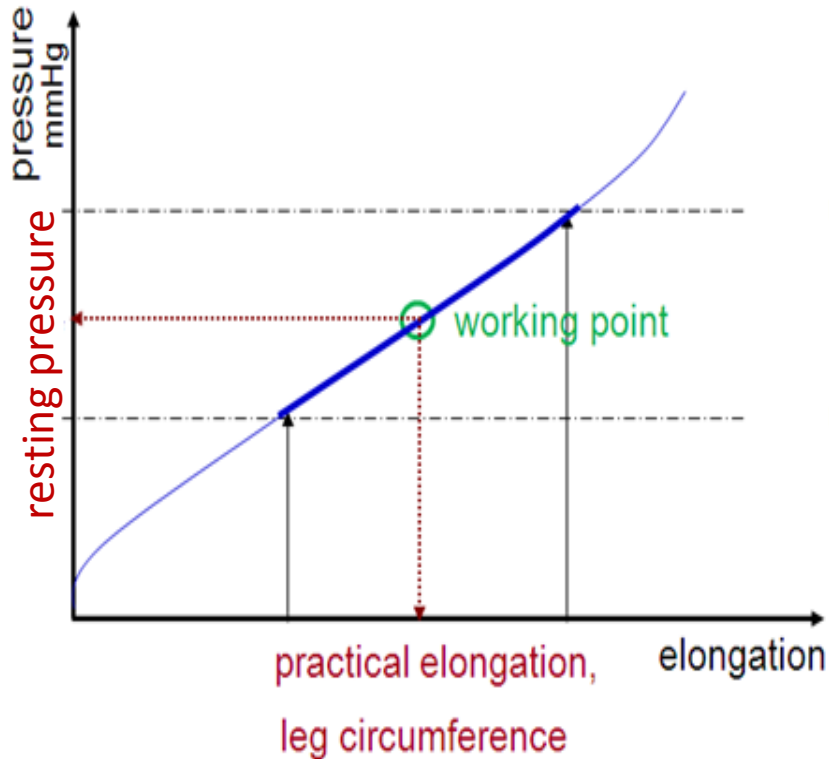
From industrial point of view:

- in vitro
- add-on to Hony-test for RAL-conformity
- circumference?



# Ranges of stiffness

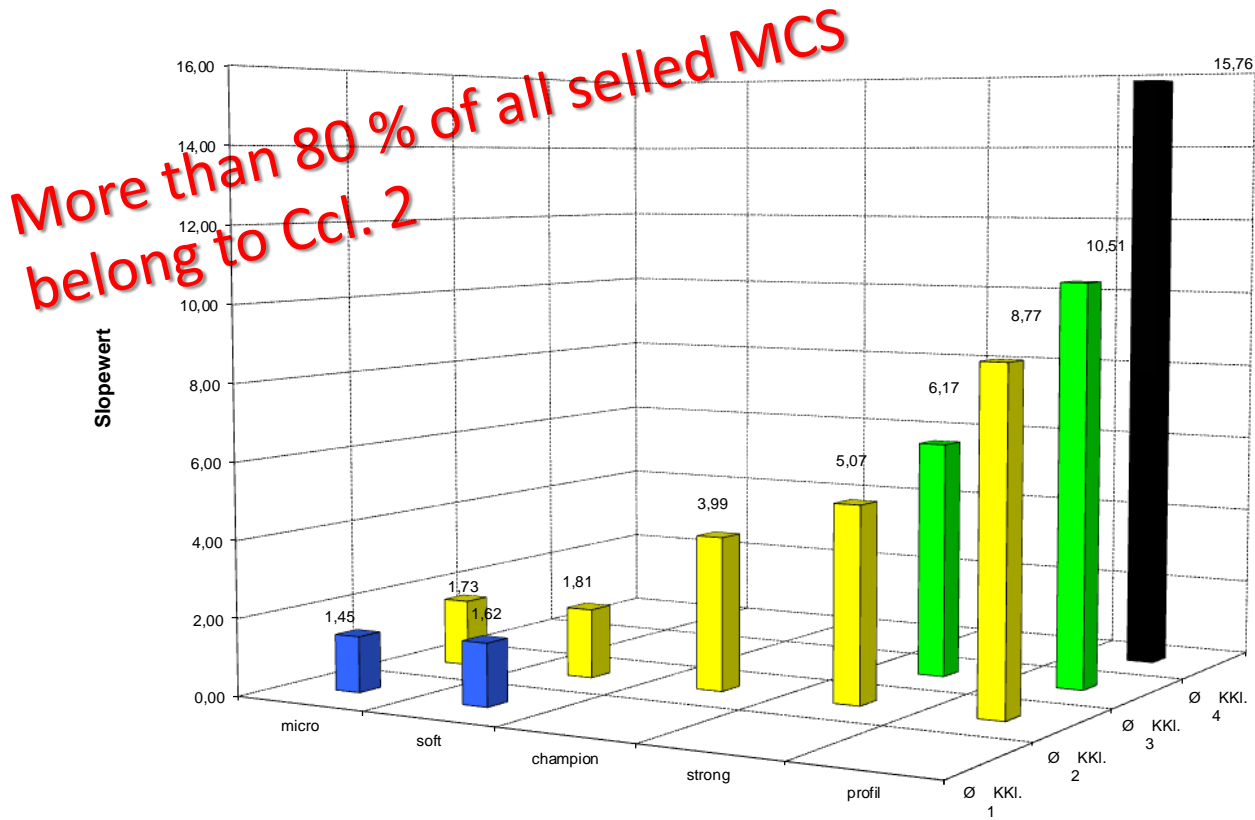
All MCS may be characterized in the following way:



Three different types

# Ranges of stiffness

## Stiffness overview



# Ranges of stiffness

First, we need a standardized measuring procedure – and then:  
**How to declare it?**

As values?

2.8

→ What does it mean?

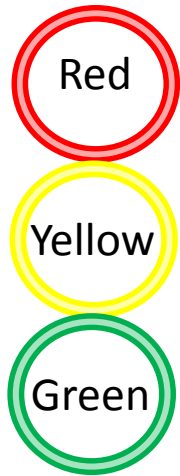
1.9



# Ranges of stiffness

At the end of the day:  
How to declare it?

As a traffic-light system?

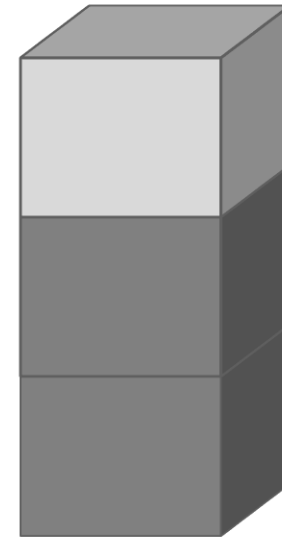


**high**

**medium**

**low**

As a column?



# Ranges of stiffness

At the end of the day:  
How to declare it?

As stars?



high



medium



low

As arrows?



# Ranges of stiffness

## Conclusion

When we try to implement a standard procedure we have to define:

- ❖ in-vitro
- ❖ The circumference value
- ❖ The hysteresis point
- ❖ The kind of declaration



**Thank you for your attention!**