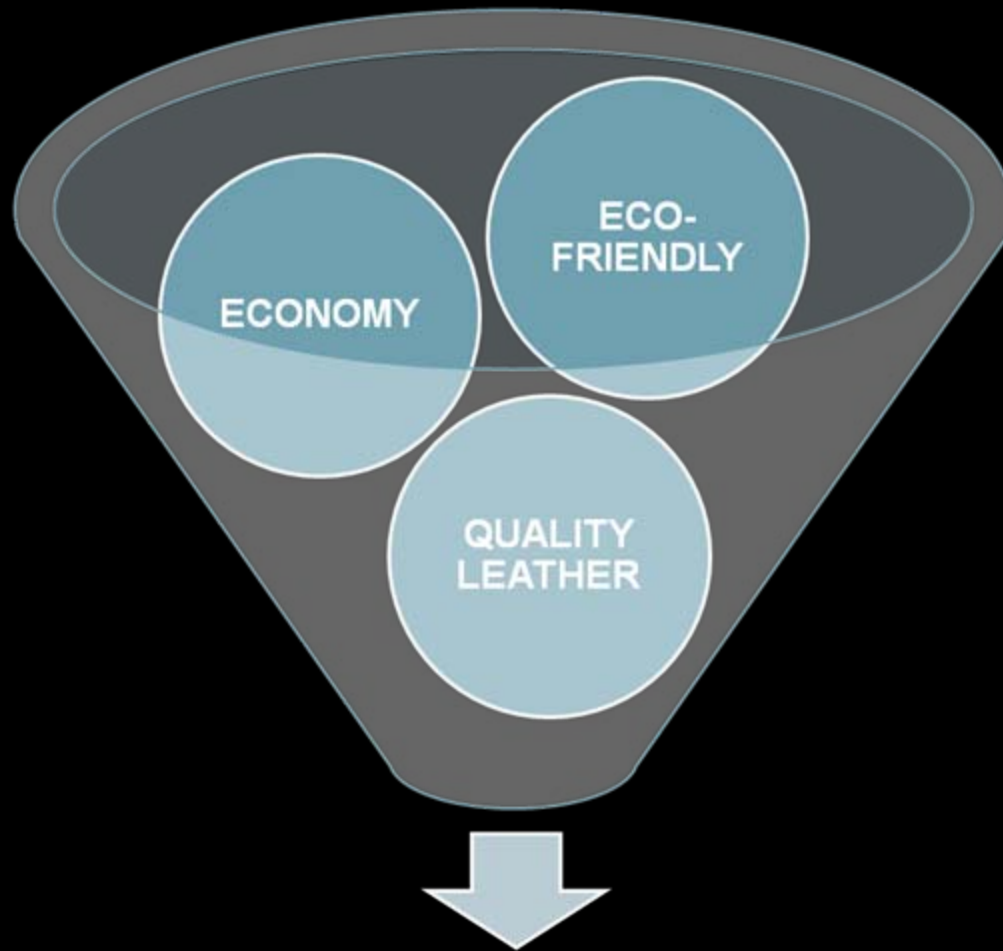




NEUTRAGENE HDB

CODYECO s.p.a.

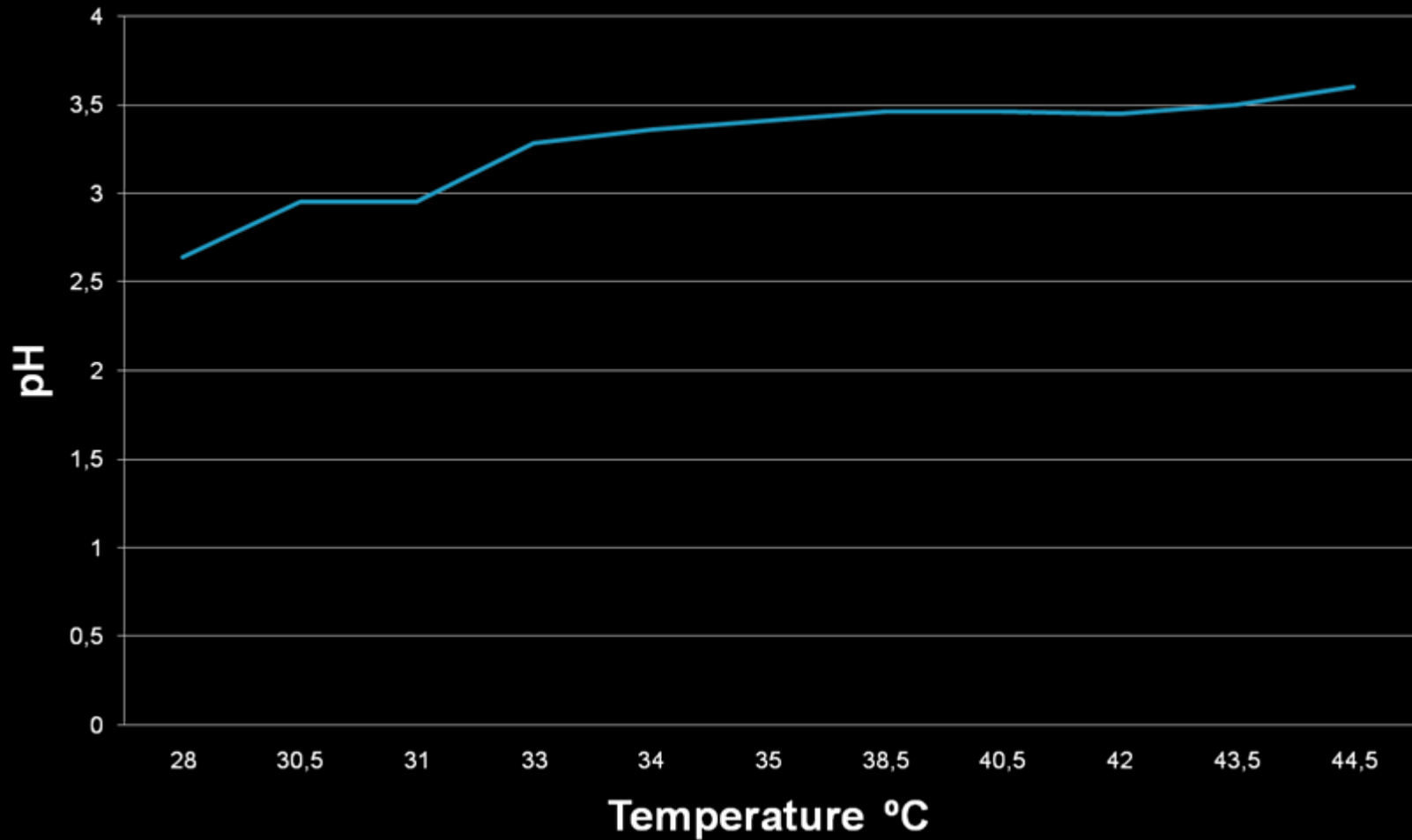
- New generation basifying product
- Organo-metallic composition
- Strong masking properties
- Higher and more regular chrome fixation
- Lower water waste pollution
- Leather with better physical properties
- More compact leather and fuller bellies
- Savings on water and chrome sulphate consumption and on water waste treatments
- Easy handling



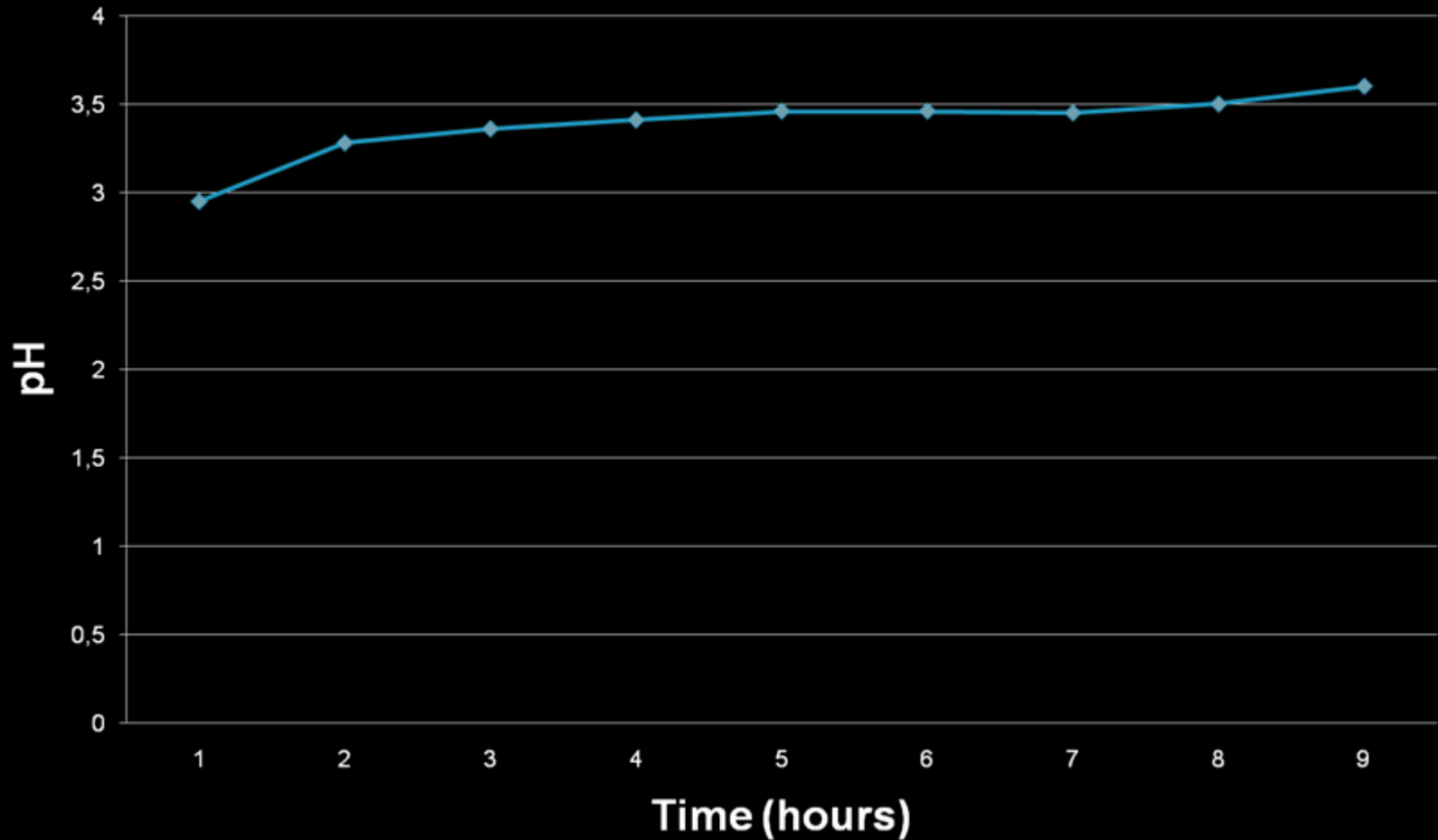
NEUTRAGENE HDB

CODYECO s.p.a.

pH behavior with the temperature



pH behavior during the process



Working conditions

- ⦿ Work with pickling final pH values between 2,9-3,0
- ⦿ Prior to begin the tanning process drain pickling baths up to 30-40%
- ⦿ Offer of **NEUTRAGENE HDB** will be around 10-12% of product based on the amount of chrome sulphate
- ⦿ Higher temperature values at the end of the tanning process ($\geq 42^{\circ}\text{C}$) will improve chrome exhaustion
- ⦿ Final pH values between 3,6 and 3,8 are advisable

Standard Process

Un-splitted cattle hide / based on fleshed weight

Water 20-22°C 50%

NaCl 6-8% run 20' °Be = 6/7

Formic acid 0,9% run 60'

Sulphuric acid 1,1% 3x20' run 180'/240' pH = 2,9-3,0

cut with BCG light yellow / drain bath up to leave inside 30/40%

Chrome 26°/33% 3%

STEROL 30 0,1% run 60'

Chrome 26°/33% 2% run 60' check full penetration

NEUTRAGENE HDB 0,3% run 45'

NEUTRAGENE HDB 0,25% run 7-9 hours final pH=3,6-3,8

final temperature = 42-46 boiling test OK add:

Water 20-22°C 100% run 15' drain / pile

Production results

Chrome powder %	NEUTRAGENE HDB	Final pH.	Final °C	Concentrated Tanning bath g/lit Cr ₂ O ₃	Waste water gr/lit Cr ₂ O ₃	% Cr ₂ O ₃ in Leather	
						wet	anhydrous
						5,0%	0,55%
5,0%	0,55%	3,69	47,5	0,96	0,63	1,9	4,2
5,0%	0,55%	3,92	46	0,55	0,35	1,9	4,3
5,0%	0,55%	3,94	45	0,55	0,4	1,7	4,0
5,0%	0,55%	3,96	50	0,35	0,3	1,8	3,9
4,5%	0,50%	3,75	51	0,3	0,25	1,5	3,5