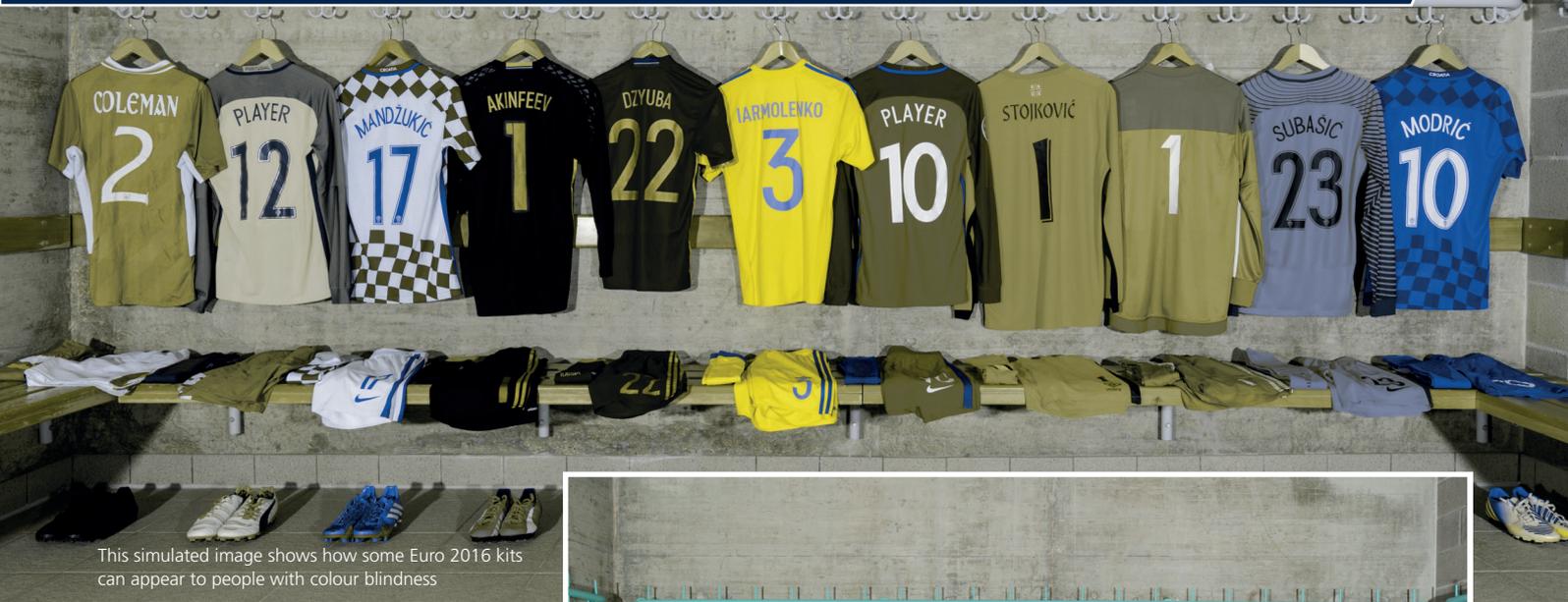


ADVICE WHEN SELECTING KIT COLOURS



This simulated image shows how some Euro 2016 kits can appear to people with colour blindness



What is colour blindness?

We see colour through 3 types of cone cells in our eyes, which absorb red, green or blue light. With colour blindness one type doesn't operate normally. Most types of colour blindness involve defects in red or green cones, meaning many colour combinations can be confusing. Colours that appear to be strongly contrasting may not actually be contrasting to colour blind players and fans.

Impact of CVD on football

Colour blindness is a particularly important issue for football as kit colour is so key to a team's identity. The most obvious problem in football is distinguishing between kits.

There are colour blind kit clashes at all levels of the game from grassroots to top flight international competitions which create fundamental problems for some players and for millions of fans.

Problems distinguishing kit colours:

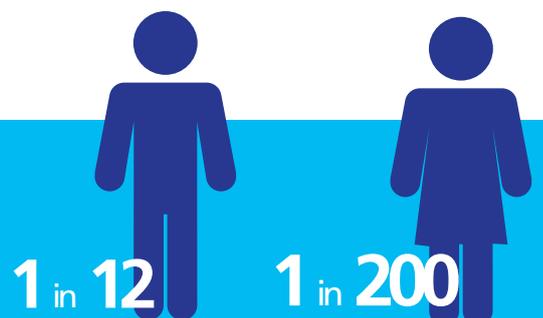
- between the outfield players;
- between outfield players and goalkeeper(s);
- between outfield players and match officials;
- of some kits which can 'disappear' against the colour of the pitch;
- under different types of lighting e.g. moving from shade into sunlight, floodlighting;
- on TV, especially wide angle shots and viewing on small screens.



Colour blindness (colour vision deficiency, CVD) is one of the world's most common inherited conditions and affects:

Statistically, one player in every male squad

300+ million people worldwide



ADVICE WHEN SELECTING KIT COLOURS

Kit combinations that cause the greatest problems

The more colour combinations there are in a kit the greater the risk of a kit clash occurring.

All red, all orange and all green kits can be difficult to distinguish from the colour of the pitch.

Some sock colours can 'disappear' against the colour of the pitch which can affect the ability of colour blind players to judge the movement of the ball.



Good kit combinations

Addressing colour blindness simply means applying some basic principles, it doesn't necessarily mean changing your team's colours – it simply means thinking about how you use them.

A simple way to check if two kits might clash is to imagine how they might appear in greyscale. You can use your smartphone/tablet 'greyscale' or 'mono' camera settings to look at both kits. If they are similar in 'greyscale' they are likely to be a 'colour blind' kit clash.

Ideally one team should play in a dark kit and the other in a light kit. Therefore when selecting new home and away kits consider choosing one dark kit and one light kit.



Key points to consider for home and away kits

- Avoid single colour red, orange, green or black kits, if possible.
- Where shirts and shorts/socks are a different colours there should be good colour contrast between shirts and shorts. Ideally have socks that match either the shirt or shorts. Avoid red, orange and green socks.
- Goal keepers and match officials kit should not clash with outfield players or the pitch.
- Avoid both teams having the same colour on their shirts.
- If shirts are patterned ensure the pattern is on the entire shirt and not just the front or back.
- Patterned v single coloured kit combinations generally help colour blind players provided the colours used do not clash with the opponent's kit.
- For the benefit of spectators, where single coloured kits clash with the pitch e.g all red / all green / all orange and dark yellow, introduce a strongly contrasting colour such as white stripes across the shoulders and sleeves.
- For training or grassroots matches supply both blue and yellow bibs.